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Something Old, Something New: The 2006 Semipalatinsk Treaty on a Nuclear Weapon-Free Zone in Central Asia

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Abstract

The present article analyses the provisions of the 2006 Semipalatinsk Treaty establishing a nuclear weapon-free zone in Central Asia, explores their different nature and compares them with those contained in the Treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba. The fundamental question to be answered is whether the Semipalatinsk Treaty will effectively contribute to the non proliferation of nuclear weapons. The article concludes that the treaty contains lights and shadows: although some positive innovations have been included in the final text, there are loopholes that might weaken the denuclearization regime. The “Great Game” in Central Asia and the tight relations of the regional states with the Russian Federation might also hamper the efforts to obtain the support of the other nuclear powers.

I. Introduction

1. According to the UN General Assembly Resolution 3472 (XXX) B of 11 December 1975, a nuclear weapon-free zone is “any zone, recognized as such by the General Assembly of the United Nations, which any group of States in the free exercise of their sovereignty, has established by virtue of a treaty or convention whereby: (a) the statute of total absence of nuclear weapons to which the zone shall be subject, including the procedure for the delimitation of the zone, is defined; (b) an international system of verification and control is established to guarantee compliance with the obligations deriving from that statute”.¹ In drafting this definition, the

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¹ On this definition, see Sandra Szurek, *Zones exemptes d’armes nucléaires et zones de paix dans le tiers-monde*, 88 *Revue générale de droit international public* (1984), 200-203. Art. VII of the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) recognizes the role of nuclear weapon-free zones by providing that “[n]othing in this Treaty affects the right of any group of States to conclude regional treaties in order to assure the total

General Assembly took inspiration from the Treaty of Tlatelolco, which had been opened for signature in 1967.²

2. In 1976, a group of experts appointed by the Conference of the Committee on Disarmament presented a comprehensive study setting out the principles that should be taken into account in order to establish a nuclear weapon-free zone.³ According to the study, disarmament obligations may be assumed not only by large groups of states, but also by smaller groups and even by individual countries; the agreement must ensure the absence of nuclear weapons in the region; the initiative for the creation of the nuclear weapon-free zone should come from the regional states and participation must be voluntary; all regional states (and in particular those militarily significant) should ideally participate in the initiative; an effective system of verification of compliance must be set up in the agreement; cooperation on all peaceful uses of nuclear energy should be promoted; and the treaty should be of unlimited duration⁴.

absence of nuclear weapons in their respective territories”.

² The Treaty of Tlatelolco provides for the establishment of a nuclear weapon-free zone in Latin America and the Caribbean and was opened for signature on 14 February 1967. It entered into force after the conditions contained in Art. 29 (1) were met, i.e. with Cuba's ratification (23 October 2002). The regional states could however waive, wholly or in part, those requirements by means of a declaration annexed to their respective instruments of ratification and which could be formulated at the time of deposit of the instrument or subsequently. For those states, the treaty entered into force upon deposit of the declaration, or as soon as those requirements were met which have not been expressly waived (Art. 29 (2)). The numeration of articles of the Treaty of Tlatelolco takes into account the amendment adopted by the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL) General Conference on 26 August 1992 (Res. 290 (E-VII)).

³ Comprehensive Study of the Question of Nuclear-Weapon-Free Zones in All Its Aspects (Special Report of the Conference of the Committee on Disarmament), UN Doc. A/10027/Add. 1, New York, 1976 [hereinafter “1976 Comprehensive Study”], Annex I.

⁴ *Ibid.*, para. 90. The United States has drafted its own list of requirements that the nuclear weapon-free zones must possess to obtain Washington's support: 1) the initiative should come from the regional states concerned; 2) all important regional states should participate; 3) the agreement should provide for an effective verification of compliance mechanism; 4) the establishment of the zone should not disturb existing security arrangements and the right of individual or collective self-defence; 5) the treaty should effectively prohibit the development, acquisition and possession of nuclear devices for any purpose; 6) the nuclear weapon-free zone states should be free to decide whether to grant or deny transit privileges within their land, sea and air territory; 7) no restrictions should be imposed on the exercise of rights provided by international law, in particular those related to navigation (Eleanor C. McDowell (ed.), *Digest of United States Practice in International Law* (Washington, D.C.: Department of State Publications, 1976), 728-729). These criteria were reaffirmed during the Tashkent Conference of 15-16 September 1997 (<<http://www.nti.org/db/nisprofs/shared/canwfz/usstate.htm>>). China has also indicated its criteria during the Tashkent conference: in particular, nuclear weapon-free zone treaties should be consistent with the principles and purposes of the UN Charter and should not lead to interferences in the internal affairs of states outside the region; the nuclear weapon-free status

3. On 30 April 1999, the UN Disarmament Commission adopted by consensus and submitted to the UN General Assembly a report that revises and updates the 1976 study in the light of the Treaties of Rarotonga, Bangkok and Pelindaba.⁵ These non-binding guidelines, like those of 1976, are meant to guide states in establishing nuclear weapon-free zones but cannot be regarded as exhaustive or be interpreted in such a way as to prejudice the setting up of a nuclear weapon-free zone.⁶

4. It has been argued that the nuclear weapon-free zone in Central Asia has been conceived in accordance with the above mentioned principles and guidelines.⁷ The idea of a nuclear weapon-free zone in Central Asia dates back to 1992, when Mongolia declared itself a denuclearized state and manifested its support for other regional disarmament measures, such as a nuclear weapon-free zone.⁸ The first

should not be conditional on other security mechanisms; the zone should have clear geographical boundaries and an effective verification mechanism including the International Atomic Energy Agency (IAEA)'s safeguards; and nuclear weapon states should provide adequate negative security assurances (Li Jinxian, Principles for the Establishment of New Zones, 20 (1) Disarmament: A periodic review of the United Nations (1997), 109-110).

⁵ Establishment of Nuclear-Weapon-Free Zones on the Basis of Arrangements Freely Arrived at Among the States of the Region Concerned (A/54/42, Annex I) [hereinafter "Report of the Disarmament Commission"], 24 United Nations Disarmament Yearbook (1999), 248-254. The report was eventually adopted by the General Assembly (UN Doc. A/RES/55/56 A). The treaty establishing a nuclear weapon-free zone in the South Pacific Ocean was signed on 6 August 1985 (fortieth anniversary of the bombing of Hiroshima) in Rarotonga (Cook Islands), and entered into force on 11 December 1986 with the deposit of the eighth instrument of ratification. The end of the Cold War, the consequent closure of the US military bases in the Philippines and the outrage caused by the French nuclear experiments in the South Pacific led to the conclusion of the treaty establishing a nuclear weapon-free zone in South-East Asia, signed in Bangkok on 15 December 1995 by the Association of Southeast Asian Nations (ASEAN) member states along with Cambodia, Laos and Myanmar. The treaty entered into force on 27 March 1997 with the ratification of the seventh state. The Pelindaba Treaty establishing the African nuclear weapon-free zone, named after the area near Johannesburg where the South African nuclear activities had taken place, was opened for signature on 11 April 1996. Unlike its predecessors, the African treaty, that will enter into force on the date of deposit of the twenty-eighth instrument of ratification, is the result of the collaboration between a universal organisation (the United Nations) and a regional one (the then Organisation of African Unity). Such cooperation materialized in the creation of a commission of experts who contributed to the drafting of the treaty and in the UN technical and financial support to the regional states. See Marco Roscini, *Le zone denuclearizzate* (Torino: Giappichelli, 2003), 8-19.

⁶ See the words of the South African representative (Disarmament Commission, Press Release DC/2641, 30 April 1999, 20).

⁷ Statement by the Ministers of Foreign Affairs of the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan, 8 September 2006, at <http://cns.miis.edu/pubs/week/pdf_support/060908_ministers_statement.pdf>, 2.

⁸ Scott Parrish, *Prospects for a Central Asian Nuclear-Weapon-Free Zone*, 8 (1)

formal proposal was however put forward the following year by the President of Uzbekistan at the United Nations General Assembly.⁹ It was then jointly supported by the regional states in the *Almaty Declaration* of 27 February 1997 and discussed in the *Tashkent Conference* of September 1997.¹⁰ For the first time, the United Nations became directly involved in the works to draft a nuclear weapon-free zone treaty.¹¹ Controversies among the Central Asian states emerged during the negotiations related to the delimitation of the borders between certain states, the legal status of the Caspian Sea and the close relationship with the Russian Federation. At the end of the *Samarcanda meeting* (25-27 September 2002), the regional states announced that they had reached an agreement,¹² and, on 8 February 2005, the draft text was finally approved in Tashkent. The treaty was opened for signature on 8 September 2006 in Semipalatinsk (Kazakhstan), a former Soviet nuclear weapons test site permanently closed in 1991, and will enter into force thirty days after the deposit of the fifth instrument of ratification.¹³ UN General Assembly Resolution 61/88 of 6 December 2006 welcomed the signing of the treaty and considered the establishment of the zone as “an important step towards strengthening the nuclear non-proliferation regime, promoting cooperation in the peaceful uses of nuclear energy and in the environmental rehabilitation of territories affected by radioactive contamination, and enhancing regional and international peace and security” and as “an effective contribution to combating international terrorism and preventing nuclear materials and technologies from falling into the hands of non-State actors, primarily terrorists”.

5. The present article discusses the main features of the Semipalatinsk Treaty and investigates whether the treaty will effectively contribute to the non proliferation of nuclear weapons. First, the article examines the obligations of the Central Asian denuclearized states and explores their different nature. It then goes on to discuss the

The *Nonproliferation Review* (Spring 2001), 142.

⁹ Address by Islam A. Karimov, President of the Republic of Uzbekistan, 6th Plenary Meeting of the United Nations General Assembly, 29 September 1993, UN Doc. A/48/PV.6, 5 October 1993.

¹⁰ On the attempts to establish a nuclear weapon-free zone in Central Asia, see Michael Hamel-Green, *Regional Initiatives on Nuclear and WMD-Free Zones. Comparative Approaches to Arms Control and Non-Proliferation* (Geneva: UNIDIR, 2005), 12-13; Oumirserik Kasenov, *On the Creation of a Nuclear-Weapon-Free Zone in Central Asia*, 6 (1) *The Nonproliferation Review* (Fall 1998), 144-147; Murat Laumulin, *Nonproliferation and Kazakistani Security Policy*, 5 (3) *The Nonproliferation Review* (Spring-Summer 1998), 127; Parrish, above n. 8, 141-148.

¹¹ Jozef Goldblat, *Denuclearization of Central Asia*, *Disarmament Forum* (4) (2007), 25.

¹² Disarmament Commission, Press Release DC/2842, 30 September 2002.

¹³ All five Central Asian states have signed the Semipalatinsk Treaty, but only Kyrgyzstan, Turkmenistan and Uzbekistan have ratified it (source: <<http://cns.miis.edu/pubs/inven/pdfs/canwz.pdf>>). The English version of the Semipalatinsk Treaty can be found at <http://cns.miis.edu/pubs/week/pdf_support/060905_canwfz.pdf>.

territorial extension of the nuclear weapon-free zone and the grounds for terminating and suspending the obligations arising from the treaty. The nuclear weapon states' negative security assurances contained in the annexed protocol and the mechanisms to verify and enforce compliance by the states parties are finally analysed. Whenever relevant, the differences between the Semipalatinsk Treaty and the other nuclear weapon-free zone treaties, as well as with the Nuclear Non-Proliferation Treaty (NPT), will be highlighted.

II. The Denuclearization Obligations of the States Parties

6. The object of the basic prohibitions contained in the Semipalatinsk Treaty is "nuclear weapons or other nuclear explosive devices", defined in Article 1 (b) as "any weapon or other nuclear explosive device capable of releasing nuclear energy, irrespective of the military or civilian purpose for which the weapon or device could be used". The devices must thus be "explosive", i.e. capable of releasing a considerable amount of nuclear energy in a very short time and in an uncontrolled manner.¹⁴ This excludes from the scope of the prohibitions conventional and experimental nuclear reactors, reprocessed nuclear material, depleted uranium ammunitions and radiological weapons, which do not cause a blast or heat wave.

7. There is an important difference between the Treaties of Tlatelolco and Bangkok on the one hand, and the Treaties of Rarotonga, Pelindaba and Semipalatinsk on the other. While the latter expressly include in the definition of "nuclear explosive device" also weapons in unassembled or partly assembled forms (thus prohibiting also the production of the weapon components), the former are silent on this point: therefore, the prohibitions only apply to completed and ready for use devices. All the five treaties, however, specify that the definition of "nuclear explosive device" does not include the means of transport or delivery of the prohibited weapons or devices if they are separable from and not an indivisible part of them. Without the inclusion of this provision, the transit of all vehicles, ships and aircraft big and equipped enough to potentially carry nuclear arms would have been banned from the zone, regardless of whether or not they actually carried the weapons.¹⁵

8. The basic prohibitions contained in the Semipalatinsk Treaty and common

¹⁴ See para. III (c) of the note of the Government of the Federal Republic of Germany issued at the moment of the signature of the NPT: "At the present stage of technology nuclear explosive devices are those designed to release in microseconds in an uncontrolled manner a large amount of nuclear energy accompanied by shock waves, i.e. devices that can be used as nuclear weapons" (<http://collections.europarchive.org/tna/20080205132101/www.fco.gov.uk/Files/kfile/024a_NonProliferationNuclearWeapons,0.pdf>).

¹⁵ Alfonso García Robles, *El Tratado de Tlatelolco: génesis, alcance y propósitos de la proscripción de las armas nucleares en la América latina* (México: El Colegio de México, 1967), at XXIV.

to all nuclear weapon-free zone treaties are the prohibition to manufacture, acquire, possess or otherwise control nuclear explosive devices and the prohibition of stationing those devices within the zone (Article 3 (1)). The possession of nuclear explosive devices is prohibited for states parties anywhere, not only on their territories, but also abroad, e.g. in a military base situated in an allied country not included in the nuclear weapon-free zone. Not only formal possession, but also control is prohibited, for instance through a puppet government controlled “by any means” by the denuclearized state. If the relationship between the two states is not of subordination but of cooperation, for instance in the context of a military alliance, one might ask whether this participation involves some kind of control over the alliance’s explosive devices and thus violates the nuclear weapon-free zone treaty. During the drafting of the 1976 Comprehensive Study, several experts argued that “such alliances should not be regarded as being in all cases competitive with nuclear-weapon-free zones”.¹⁶ The answer would thus depend on the circumstances of each case: if “a treaty or alliance [...] does not envisage nuclear retaliation in support of an ally, nor include the stationing of nuclear weapons on the territory of that ally”, then it would be “no bar to the creation of a nuclear-weapon-free zone” and in such a case “a non-nuclear weapon State allied to a nuclear-weapon State can [...] also be a party to a nuclear-weapon-free zone treaty”.¹⁷ In order to avoid assuming conflicting obligations, the denuclearized state should however verify that the nuclear weapon-free zone treaty is not in contrast with other agreements to which it is a party.¹⁸

9. The other fundamental provision common to all nuclear weapon-free zone treaties is the prohibition of stationing nuclear explosive devices within the zone, which is defined in Article 1 (c) of the Semipalatinsk Treaty as “implantation, emplacement, stockpiling, storage, installation and deployment”.¹⁹ This prohibition

¹⁶ See the 1976 Comprehensive Study, above n. 3, Annex I, para. 92. This conclusion was reasserted by several delegations, including the Italian one (*ibid.*, Annex II, para. 132).

¹⁷ 1976 Comprehensive Study, above n. 3, Annex I, para. 92. According to the Federal Republic of Germany, however, “we do not want to imply a priori that simultaneous membership of a military alliance and of a nuclear-weapon-free zone is impossible in theory. But, in our view, such a simultaneous membership would give rise to considerable and practically insurmountable difficulties” (*ibid.*, Annex II, para. 116).

¹⁸ Report of the Disarmament Commission, above n. 5, para. 32. This reference to the compatibility with previous international and regional agreements was deemed necessary by the US, British, French and Polish delegates (Disarmament Commission, Press Release DC/2641, 30 April 1999, 10-12, 22).

¹⁹ The definition is identical to that contained in Art. 1 (d) of the Bangkok Treaty. Art. 1 (d) of the Pelindaba Treaty and Art. 1 (d) of the Rarotonga Treaty also include in the definition of stationing the “transport on land or inland waters”. While in the Bangkok Treaty transport by states parties is the object of a specific prohibition (even though it is not qualified as a form of stationing), no prohibition of transport is contained in the Semipalatinsk Treaty. The Treaty of Tlatelolco, without using the word “stationing”, prohibits “the receipt, storage, installation, deployment and any form of possession of any nuclear weapons, directly or

constitutes the main difference between the nuclear weapon-free zone treaties and the NPT. Not necessarily does the prohibition of possession assumed by a state involve the denuclearization of its territory. Indeed, the NPT allows China, France, the Russian Federation, the United Kingdom and the United States to deploy nuclear weapons on the territory of non-nuclear weapon states parties, providing that the latter do not have control over them. On the contrary, the Treaties of Tlatelolco, Rarotonga, Bangkok, Pelindaba and Semipalatinsk prohibit the presence of nuclear explosive devices within the zones, whoever owns or controls them. This was one of the problems that blocked the negotiations for the establishment of the Central Asian nuclear weapon-free zone. Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan are in fact bound, together with the Russian Federation, by the 1992 Tashkent Collective Security Treaty, Art. IV of which provides that the parties will give each other all assistance necessary, including military assistance, in response to aggression.²⁰ According to Russian officials, this provision allows the deployment of Russian nuclear weapons on the territory of the other parties if, after a joint decision, this was deemed necessary.²¹ In the opinion of the United States, United Kingdom and France, on the other hand, if so interpreted the provision would undermine the central purpose of establishing a nuclear weapon-free zone.²² Article 12 (1) was eventually included in the final text, providing that the Semipalatinsk Treaty “does not affect the rights and obligations of the Parties under other international treaties which they may have concluded prior to the date of the entry into force of this Treaty”.²³ At first sight, this appears to be a clause under Article 30 (2) of the 1969

indirectly” (Art. 1).

²⁰ In 2002, the Collective Security Treaty Organization (CSTO) was founded, of which only Turkmenistan is not a member (Uzbekistan rejoined in 2006 after deciding in 1999 not to prolong its participation). Common military exercises were carried out in 2005 and, in October 2007, the creation of a peacekeeping force was agreed. The CSTO states have also increased their cooperation within the framework of the Shanghai Cooperation Organization (SCO), which led to large-scale joint military exercises in 2007 (Martha Brill Olcott, *Strategic Concerns in Central Asia, Disarmament Forum* (4) (2007), 11). Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan are also members of the SCO, along with China and Russia (Iran has applied for membership on 24 March 2008). It has been observed that “the heyday of US military influence in the [Central Asia] region, and likely that of NATO as well, does seem to have passed, at least for the foreseeable future” and that the present trend is towards increased security cooperation with the Russian Federation (ibid.).

²¹ Parrish, above n. 8, 146.

²² Sonia Luthra, *Central Asian States Renounce Nuclear Weapons*, 36 (8) *Arms Control Today* (October 2006), <http://www.armscontrol.org/act/2006_10/CentralAsian.asp>.

²³ A similar provision is contained in Art. 21 of the Treaty of Tlatelolco, according to which “[n]one of the provisions of this Treaty shall be construed as impairing the rights and obligations of the Parties under the Charter of the United Nations or, in the case of States members of the Organization of American States, under existing regional treaties”. However, the reference here is to obligations in the framework of the UN and the

Vienna Convention on the Law of Treaties ensuring that the provisions of the Tashkent Treaty will prevail over those of the Semipalatinsk Treaty, where incompatible. Nonetheless, if the Russian interpretation is correct, i.e. if the Tashkent Treaty does provide for the right to deploy Russian nuclear weapons on the territory of other parties, and if this right is really preserved by Article 12 (1) of the Semipalatinsk Treaty, then it would be hard to see how the latter treaty would have any meaning at all. Such an interpretation of Article 12 (1) would be absurd and unreasonable and in contrast with the principle of effectiveness, according to which “a treaty must be given an interpretation that enables its provisions to be ‘effective and useful’, that is, to have the appropriate effect”.²⁴ It is thus this writer’s opinion that the first paragraph of Article 12 of the Semipalatinsk Treaty should be interpreted in the light of the second paragraph, which provides that “[t]he Parties shall take all necessary measures for effective implementation of the purposes and objectives of this Treaty in accordance with the main principles contained therein”.²⁵ The combined effect of the two paragraphs of Article 12 is that only those provisions of previous treaties that do not prejudice the effective implementation of the purposes and objects of the Semipalatinsk Treaty are preserved: therefore, the Central Asian denuclearized states parties to the Tashkent Treaty still have an obligation to provide military assistance to the other parties (including Russia) in case of aggression, but this assistance cannot include the acceptance of nuclear explosive devices on their territory.²⁶ Of course, assuming that Russia’s interpretation of Article IV of the Tashkent Treaty is correct, the states parties to both the Semipalatinsk and the Tashkent Treaties might incur international responsibility under Article 30 (5) of the Vienna Convention for the assumption of conflicting obligations.

10. It is worth mentioning that Article 3 (1) (a) of the Semipalatinsk Treaty prohibits not only the manufacture, acquisition, possession, control and stationing of nuclear explosive devices but also the conduct of nuclear military research: only the Pelindaba Treaty contains a similar prohibition (Article 3), while the other nuclear weapon-free zone treaties are silent on this point.

11. The denuclearized states are bound not only not to carry out the above mentioned prohibited activities, but also not to allow the conduct of such activities in their territories by anyone (Article 3 (1) (d)) and not to seek or receive assistance or take any action to assist or encourage them (Article 3 (1) (b) and (c)). The prohibition

Organization of American States (OAS), and not to security agreements.

²⁴ Antonio Cassese, *International Law* (Oxford: Oxford University Press, 2005), 179.

²⁵ This second paragraph was subsequently added by the drafters to accommodate the criticism of France, United Kingdom and United States, which however found this addition insufficient (Goldblat, above n. 11, 29).

²⁶ Goldblat suggests another possible solution to affirm the compatibility of the two treaties, i.e. that they do not have the same subject matter: one prohibits the stationing of nuclear weapons within a certain region, the other provides for an obligation to defend an allied country. The presence of nuclear weapons on the territory of the attacked state is not necessary to defend it, as they could be launched from outside the zone (Goldblat, above n. 11, 30).

of assistance cannot however prejudice the cooperation in the field of the peaceful uses of nuclear energy, even if materials and technology are essentially the same (providing of course that no nuclear explosions are carried out).²⁷ *A fortiori*, the prohibition of assistance should not be interpreted as prohibiting all scientific or economic cooperation between nuclear weapon and non-nuclear weapon states. The legislative history of the Rarotonga Treaty clearly shows that the words “not to take any action to assist or encourage” do not cover actions having purposes different from those prohibited by the treaty but that could incidentally support them.²⁸ There appears to be no reason to interpret the Semipalatinsk Treaty differently.²⁹

12. Apart from the basic prohibitions contained in Article 3, the Semipalatinsk Treaty imposes other obligations on the states parties. Article 8 requires them to use for exclusively peaceful purposes the nuclear material and facilities which are within their territory, under their jurisdiction or under their control anywhere and to conclude with the IAEA and bring into force a safeguards agreement (INFCIRC/153 (Corr.)) and an Additional Protocol (INFCIRC/540 (Corr.)) no later than eighteen months from the treaty’s entry into force.³⁰ Article 8 also requires the parties not to provide source or special fissionable material or related equipment to any non-nuclear weapon state unless that state has concluded with the IAEA a comprehensive safeguards agreement and related Additional Protocol.³¹ The provision of such material or equipment to nuclear weapon-states is not prohibited. The Semipalatinsk Treaty is the first nuclear weapon-free zone treaty to refer to the 1997 Additional Protocol providing for more intrusive and comprehensive verification measures. Indeed, under the safeguards system based on INFCIRC/153, the possibility for the IAEA to detect clandestine nuclear activities is limited, as inspections focus on declared nuclear material and on strategic points in declared facilities. Under the Additional Protocol, instead, the IAEA is given the authority to inspect undeclared facilities and to access all parts of a state’s nuclear fuel cycle, including uranium mines, as well as any other location where nuclear material is or may be present.

13. Unlike the NPT,³² the Semipalatinsk Treaty also addresses conduct by non-state actors. Under Article 9 of the Semipalatinsk Treaty, each state party

²⁷ Art. 7.

²⁸ Nigel Fyfe and Christopher Beeby, *The South Pacific Nuclear Free Zone Treaty*, 17 *Victoria University of Wellington Law Review* (1987), 41.

²⁹ Treaties in *pari materiae* can be supplementary means of interpretation.

³⁰ Kazakhstan has research reactors at Almaty and Kurchatov and a fabrication unit at Ust-Kamenogorsk, Kyrgyzstan has a processing combine and Uzbekistan has two small research reactors near Tashkent (Hamel-Green, above n. 10, 15). On Kazakhstan’s civilian nuclear programme, see Laumulin, above n. 10, 129-130.

³¹ Uranium mines are located in Kazakhstan and Uzbekistan (Burkhard Conrad, *Regional (Non-) Proliferation: The Case of Central Asia*, Conflict Studies Research Centre, April 2000, 2-3 <www.defac.ac.uk/colleges/csrc/document-listings/ca/K29>).

³² Jack I. Garvey, *A New Architecture for the Non-Proliferation of Nuclear Weapons*, 12 *Journal of Conflict and Security Law* (2008), 344.

undertakes to maintain “effective standards of physical protection of nuclear material, facilities and equipment to prevent its unauthorized use or handling or theft”. The measures adopted to this aim must be “at least as effective” as those called for by the 1980 Convention on the Physical Protection of Nuclear Material³³ and by the recommendations and guidelines developed by the IAEA in this field.³⁴ Article 9 has been included as a measure to fight the increased risk of theft and the possibility to build nuclear arms from raw material.³⁵ This is particularly important in the Central Asian region, where highly enriched uranium remains present at several sites and where the possibility of theft of nuclear-related materials is high.³⁶ Central Asia might also become a transit area for terrorist smuggling of nuclear materials.³⁷ The Semipalatinsk Treaty could as well be seen as a step towards the implementation of Security Council Resolution 1540 of 28 April 2004, which requires all states to adopt effective laws which prohibit any non-state actors to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery and to establish, develop, review and maintain appropriate physical

³³ The Convention, opened for signature on 3 March 1980 and entered into force on 8 February 1987, requires each contracting party “to take appropriate steps within the framework of its national law and consistent with international law to ensure as far as practicable that, during international nuclear transport, nuclear material within its territory, or on board a ship or aircraft under its jurisdiction insofar as such ship or aircraft is engaged in the transport to or from that State, is protected at the levels described in Annex 1” (Art. 3). The purpose, which is instrumental to Arts. I, II and III of the NPT, is to prevent fissile material, usable for the construction of arms from being illegally stolen. Unlike the other Central Asian states, Kyrgyzstan has yet not become a party of the Convention on Physical Protection (source: <<http://ola.iaea.org/factSheets/CountryDetails.asp?country=KG>>).

³⁴ The recommendations were prepared for the first time in 1972 by a panel of experts convened by the IAEA Director General and were revised in 1975, 1977, 1989, 1993 and 1997. Even though they are not binding, the implementation of the IAEA recommendations is required by the agreements that the Agency concludes with the states to which it provides assistance and by the bilateral cooperation agreements in the field of nuclear energy.

³⁵ The only other treaty where this provision appears is the Pelindaba Treaty (Art. 10). In Res. 1540 (2004), the UN Security Council expressed its concern for “the threat of illicit trafficking in nuclear, chemical, or biological weapons and their means of delivery, and related materials, which adds a new dimension to the issue of proliferation of such weapons and also poses a threat to international peace and security”.

³⁶ It has indeed been suggested that “[t]he leading WMD-related risk in Central Asia is the possibility of the theft of materials and their sale by smugglers or through brokers to terrorist or proliferant states” (Togzhan Kassenova, *Central Asia: Regional Security and WMD Proliferation Threats*, Disarmament Forum (4) (2007), 13). On the proliferation threats in Central Asia, see *ibid.*, 15-17.

³⁷ Scott Parrish and William Potter, *Central Asian States Establish Nuclear-Weapon-Free-Zone Despite U.S. Opposition*, CNS Research Story, 5 September 2006, at <<http://cns.miis.edu/pubs/week/060905.htm>>. For incidents of smuggling of radioactive material in the region, see Conrad, above n. 31, 3-4.

protection measures and effective domestic, border and export controls to prevent trafficking of weapons of mass destruction and related materials.³⁸

14. Certain obligations contained in other nuclear weapon-free zone treaties have not been included in the Semipalatinsk Treaty: the prohibition of armed attack on nuclear installations (Article 11 of the Pelindaba Treaty), the obligation to declare, dismantle, destroy or convert nuclear explosive devices and the facilities for their manufacture (Article 6 of the Pelindaba Treaty), the obligation to accede to the Convention on Early Notification of a Nuclear Accident (Article 6 of the Bangkok Treaty). Furthermore, the Semipalatinsk Treaty does not expressly prohibit the use of nuclear explosive devices by the states parties. It could however be argued that such prohibition was considered implicit, as, after banning possession, control and any form of acquisition of such weapons, any use by the denuclearized states would be practically impossible. What Article 3 (1) (d) (i) of the Semipalatinsk Treaty does expressly say is that the contracting parties must not allow the use of nuclear weapons or other nuclear explosive devices in their territory. This entails an obligation on the Central Asian states to prevent a nuclear weapon state from launching such devices from anywhere within their territory (for instance, from overflying aircraft) regardless of whether the target is located within or outside the nuclear weapon-free zone.

III. The Environmental Provisions of the Semipalatinsk Treaty

15. By establishing a nuclear weapon-free zone, the regional states aim not only to prevent the dissemination of nuclear weapons and to promote disarmament, but also to protect the natural environment by prohibiting certain activities that might damage it.³⁹ This ecological element, however, does not always have the same importance: if it plays a significant role in the Treaties of Rarotonga, Bangkok, Pelindaba and Semipalatinsk, it is only of minor significance in the Treaty of Tlatelolco. Indeed, the Cuban missile crisis and the risk of a nuclear war had left other problems in the background.

16. The Semipalatinsk Treaty requires the states parties not to carry out any nuclear weapon test explosion or any other nuclear explosion, to prohibit and prevent any such explosions at any place under their jurisdiction or control, and to refrain from causing, encouraging or in any way participating in the carrying out of any nuclear test explosion or any other nuclear explosion by other states (Article 5).⁴⁰ The

³⁸ Kazakhstan appears to have the most developed export control system in Central Asia and is also the only state to participate in the Nuclear Suppliers Group control regime (Kassenova, above n. 36, 19).

³⁹ According to the 1999 Report of the Disarmament Commission, “[n]uclear-weapon-free zones may also serve to promote cooperation aimed at ensuring that the regions concerned remain free of environmental pollution from radioactive wastes and other radioactive substances and, as appropriate, enforcing internationally agreed standards regulating international transportation of those substances” (above n. 5, para. 17).

⁴⁰ See also Art. 1 of the Treaty of Tlatelolco, Art. 6 of the Rarotonga Treaty, Art.

prohibition of nuclear test explosions is usually conceived as a provision aimed to prevent nuclear proliferation by hampering the development of new types of weapons of mass destruction and the modernization of the existing ones. In the nuclear weapon-free zone treaties, however, this prohibition has mainly an environmental purpose. Indeed, these agreements are concluded by states that (with a few exceptions) have never had nuclear ambitions: the inclusion of the prohibition under examination mainly aims to prevent that the ecosystem of certain regions is damaged by nuclear explosions carried out by the nuclear powers.⁴¹ For instance, the South Pacific nuclear weapon-free zone was established mainly in order to prevent further nuclear tests by France in the region. As far as Central Asia is concerned, it is worth recalling that the Soviet Union conducted more than 450 atmospheric and underground nuclear tests in Semipalatinsk between 1949 and 1989.⁴²

17. The Semipalatinsk Treaty requires the states parties not to carry out and to prohibit *any* nuclear explosion, not only those above a certain threshold as provided in the 1974 Threshold Test Ban Treaty and the 1976 Peaceful Nuclear Explosions Treaty, concluded by the United States and the Soviet Union during the Cold War. Furthermore, both underground and atmospheric explosions are prohibited: in that, the Semipalatinsk Treaty takes the 1996 Comprehensive Test Ban Treaty (CTBT) (expressly referred to in Article 5)⁴³ as a model and differs from the 1963 Partial Test Ban Treaty (PTBT), Article 1 (1) of which prohibits nuclear explosions in the atmosphere, in outer space and under water (including the territorial sea and the high sea) or in any other environment only “if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted” and thus implicitly allows underground explosions if they do not cause the leakage of radioactivity.⁴⁴ The prohibition of all nuclear test explosions solves the problems caused by the absence, in the PTBT, of a definition of “underground” explosions in order to distinguish them from the “atmospheric” ones and by the impossibility to establish in advance whether or not an underground nuclear test explosion will cause the release of radioactive material with transboundary effects.

18. However, the provisions on testing included in the Semipalatinsk Treaty also contain some loopholes. While the other nuclear weapon-free zone treaties simply prohibit the “testing” of nuclear weapons or nuclear explosive devices,

3 (1) (c) and 3 (2) (c) of the Bangkok Treaty and Art. 5 of the Pelindaba Treaty.

⁴¹ As acknowledged in the guidelines adopted by the Disarmament Commission in 1999, the nuclear weapon-free zones are “a useful complement to the international regime for the prohibition of any nuclear-weapon-test explosions or any other nuclear explosion” (Report of the Disarmament Commission, above n. 5, para. 37)

⁴² Abel J. González, *Radioactive Residues of the Cold War Period: A Radiological Legacy*, IAEA Bulletin, No. 40 (4) (December 1998), 4.

⁴³ All five Central Asian states have ratified the CTBT.

⁴⁴ The only other treaty that comprehensively prohibits all nuclear explosions, including underground ones, in its territorial scope of application is the 1959 Washington Treaty on Antarctica (Art. V (1)).

according to Article 5 of the Semipalatinsk Treaty the parties undertakes not to carry out or cause, encourage or in any way participate in any nuclear *explosion*. Hence, by prohibiting the carrying out of nuclear “explosions” and not simply of “tests”, the treaty leaves the door open to simulations. The reasons for this are not clear and it might well be an oversight. Furthermore, to be banned the test explosion must be “nuclear” and there must be some release of this type of energy: hydrodynamic experiments (where the fissile material of the weapon is replaced by other materials and there is no release of atomic energy) and sub-critical tests (where no self-sustaining nuclear chain reaction can take place even though special nuclear material is present) are thus not prohibited.⁴⁵ It is also to be noted that, as the definitions of “nuclear weapon” and “nuclear explosive device” contained in the treaties on nuclear weapon-free zones do not include the means of transport or delivery if separable from the weapons and not an indivisible part of them, missile tests are not prohibited. Finally, unlike the Treaties of Rarotonga and Pelindaba and like the Treaties of Tlatelolco and Bangkok, the Semipalatinsk Treaty is not accompanied by a protocol by the ratification of which the nuclear weapon states expressly accept not to carry out nuclear test explosions and to refrain from assisting and encouraging them within the zone.⁴⁶

19. Under Article 3 (2) of the Semipalatinsk Treaty, the parties also undertake not to allow the disposal in their territory of radioactive waste of other states. “Radioactive waste” is defined in Article 1 (e) as “any substance containing radionuclides, that will be or has already been removed and is no longer utilized, at activities and activity concentrations of radionuclides greater than the exemption levels established in international standards issued by the IAEA”. This prohibition is however not as broad as its counterpart in other nuclear weapon-free zone treaties, as it does not prohibit the disposal of a state party’s radioactive waste in its own territory: indeed, the parties are only required not to allow the disposal of radioactive waste *of other states*.⁴⁷ It is not clear whether this is an intentional omission.

⁴⁵ The United States carried out its sixth sub-critical test on 9 February 1999, maintaining its legality under the CTBT because it did not trigger a nuclear chain reaction (Ramesh Thakur, *South Asia and the Politics of Non-Proliferation*, 54 *International Journal* (1998-1999), 407). During the sixth NPT Review Conference, however, Switzerland argued that sub-critical and laboratory tests are not consistent with the preamble of the CTBT (Rebecca Johnson, *The 2000 NPT Review Conference: A Delicate, Hard-Won Compromise*, 46 *Disarmament Diplomacy* (May 2000), <<http://www.acronym.org.uk/46npt.htm>>).

⁴⁶ The reason for the inclusion of such a protocol in the Treaties of Rarotonga and Pelindaba is well-known: France carried out nuclear experiments in Algeria until 1963, while the South Pacific Ocean was the firing ground for the first atmospheric and then underground nuclear test explosions of United Kingdom, United States and France.

⁴⁷ See Art. 7 of the Rarotonga Treaty, Art. 7 of the Pelindaba Treaty, Art. 3 (3) of the Bangkok Treaty. There is no prohibition of dumping in the Treaty of Tlatelolco. The Central Asian states have also ratified the 1997 Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, entered into force in 2001, which aims to ensure that there are effective defences against hazards related to the

20. Unlike the Bangkok Treaty (Article 6), the Semipalatinsk Treaty does not provide for the obligation of early notification of a nuclear accident. On the other hand, the Central Asian treaty contains a “green” provision not appearing in any other nuclear weapon-free zone treaty. According to Article 6, “[e]ach party undertakes to assist any efforts toward the environmental rehabilitation of territories contaminated as a result of past activities related to the development, production or storage of nuclear weapons or other nuclear explosive devices, in particular uranium tailings storage sites and nuclear test sites”. The provision refers to the areas contaminated as a result of the nuclear-related activities carried out in Central Asia during the Soviet era, such as weapons storage and testing, uranium mining, plutonium production.⁴⁸ The obligation is however a mere obligation of conduct, not an obligation to achieve a precise result (the environmental rehabilitation of contaminated territories) and is presumably triggered by the request for assistance of the state to which the contaminated territories belong. The main problem for the implementation of this provision might be the lack of adequate financial and human resources to fulfil the task.

21. From the above considerations, it should be evident that the Semipalatinsk Treaty, like the other nuclear weapon-free zone treaties, has a composite structure where both localized and non-localized obligations are present⁴⁹: the prohibition of stationing nuclear explosive devices (whoever possesses or controls them) within the zone is a localized obligation, while the prohibitions of possession, control, use and manufacture, of military nuclear research, testing, to allow the disposal of radioactive waste, of export of fissile material without safeguards, and the obligations of physical protection of nuclear materials and equipment and to conclude a safeguards agreement with the IAEA are characterized more by a personal than by a territorial nature. This composite structure has consequences on state succession. The localized obligations are transmitted to the successor state(s) under Article 12 of the 1978 Vienna Convention on Succession of States in Respect of Treaties (or the customary norm of identical content).⁵⁰ On the contrary, the clean slate rule applies to non-

management of such materials and to prevent accidents with radiological effects. The Convention applies to both radioactive waste management from civilian applications and to military spent fuel or radioactive waste if and when such materials are transferred permanently to and managed within exclusively civilian programmes. The Convention also establishes rules for the transboundary movement of spent fuel and radioactive waste.

⁴⁸ Kassenova, above n. 36, 13. The Semipalatinsk nuclear test site in Kazakhstan and the uranium tailings dump in Kyrgyzstan are the most well-known examples of areas in Central Asia contaminated as a result of the Soviet nuclear activities (Alibek Dzhekshenkulov, *A Nuclear-Free Zone in Central Asia*, 45 *International Affairs* (Moscow) (4) (1999), 54).

⁴⁹ O’Connell admits the existence of treaties, such as those establishing military bases, where personal and territorial elements are intermingled (Daniel Patrick O’Connell, *Recent Problems of State Succession in Relation to New States*, 130 *Recueil des Cours* (1970), 194-195).

⁵⁰ According to the ICJ, Art. 12 of the Vienna Convention reflects customary

localized obligations.⁵¹ Accordingly, the state that acquires in whole or in part the territory of a denuclearized state will be able to possess, manufacture and use (if such use is consistent with other international law) nuclear explosive devices as long as they are not stationed in the territory formerly belonging to the denuclearized state. The same conclusion applies to states formed from the dismemberment of a denuclearized state and to those incorporating or resulting from the merger of two or more states, of which at least one was party to a nuclear weapon-free zone treaty. Of course, the new state exercising sovereignty over the denuclearized territory might decide to succeed also in the non-localized obligations, but it would be under no international obligation to do so.

IV. The Territorial Extension of the Central Asian Nuclear Weapon-Free Zone and the Rights of Entry into Ports and Overflight of Foreign Nuclear Ships, Aircraft and Missiles

22. According to Article 1 (a) of the Semipalatinsk Treaty, the Central Asian nuclear weapon-free zone includes Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan. The treaty is thus not open: only after amending Article 1 could other states adhere to it. A provision envisaging the possible expansion of the zone to neighbouring states was eventually deleted at the insistence of United Kingdom, United States and France, which were worried that participation in a nuclear weapon-free zone might be used by Iran in order to shield its nuclear programme.⁵²

23. From a geographical point of view, the zone covers “the land territory, all waters (harbors, lakes, rivers and streams) and the air space above them, which *belong*” to the above mentioned five states (Article 2 (a)).⁵³ It appears that, in the Sapporo meeting of October 1999, the Central Asian states agreed that the zone should not include any portions of the Caspian Sea, the waters of which have not been clearly delimited yet.⁵⁴ If interpreted according to the ordinary meaning of the terms

international law (Gabčíkovo-Nagymaros Project (Hungary v Slovakia), ICJ Reports 1997, para. 123).

⁵¹ O’Connell maintains that “[t]he transmissible portions of a treaty may be severed from the intransmissible if the two portions (a) deal with separate subject-matters, (b) do not depend upon each other, and (c) are not inseparably connected in the scheme of treaty performance” (Daniel Patrick O’Connell, *State Succession in Municipal Law and International Law* (Cambridge: Cambridge University Press, 1967), Vol. II, at 301). The separability of the different provisions contained in the same treaty is also envisaged in the 1969 Vienna Convention on the Law of Treaties (Art. 44).

⁵² Luthra, above n. 22. In February 2008, the Presidents of Tajikistan and Iran issued a joint statement where they support the creation of nuclear weapon-free zones (Tajikistan, Iran Stand for a World Without Nuclear Arms, Kazinform, 13 February 2008, <<http://www.inform.kz/showarticle.php?lang=eng&id=160537>>).

⁵³ Emphasis added.

⁵⁴ Parrish, above n. 8, 144. Two littoral states - Kazakhstan and Turkmenistan -

employed, however, Article 2 (a) does not explicitly (and permanently) exclude the Caspian from the scope of application of the treaty.⁵⁵ Indeed, according to the prevalent view,⁵⁶ the Caspian is not a “sea” but rather an international lake not governed by the law of the sea, and lakes are included in the list contained in Article 2 (a). What presently prevents the Caspian’s inclusion in the zone is the fact that no agreement among the littoral states has been reached on the delimitation of its waters and thus no part of them uncontroversially “belongs” to Kazakhstan and Turkmenistan. Nonetheless, once such an agreement will be concluded and relevant portions of the Caspian waters will be determined to belong to the two Central Asian denuclearized states, those waters will constitute part of their territory and will consequently be included in the zone, in accordance with Article 2 (a) of the Semipalatinsk Treaty. This interpretation is supported by the inclusion of the precautionary clause contained in the second paragraph of Article 2, according to which “[n]othing in this Treaty shall prejudice or in any way affect the rights of any Central Asian States in any dispute concerning the ownership of or sovereignty over lands or waters that may or may not be included within this zone”. If read together, all the two paragraphs of Article 2 of the Semipalatinsk Treaty seem to say is that the extension of the application of the Semipalatinsk Treaty to any portion of the Caspian depends on the successful conclusion of the negotiations on the delimitation of its waters, matter which is left unaffected by the treaty.

24. It follows from the above considerations and in particular from the qualification of the Caspian as a lake that the law of the sea problems related to the freedom of navigation of foreign ships carrying nuclear weapons through the territorial sea and exclusive economic zones of denuclearized states, emerged in connection with the Treaties of Tlatelolco, Rarotonga, Pelindaba and Bangkok, do not arise with regard to the Semipalatinsk Treaty.⁵⁷ The only controversial issue would be the entry of foreign nuclear ships in the denuclearized states’ harbors and the overflight of the denuclearized states’ territories by aircraft with nuclear weapons on board. Article 4 provides that “[w]ithout prejudice to the purposes and objectives of this treaty, each Party, in the exercise of its sovereign rights, is free to resolve issues related to transit through its territory by air, land or water, including visits by foreign ships to its ports and landing of foreign aircraft at its airfields”.⁵⁸ This

are parties to the Semipalatinsk Treaty.

⁵⁵ The issue is not without importance, as the Russian Federation (a nuclear weapon state) is also a littoral state.

⁵⁶ William E. Butler, *The Soviet Union and the Continental Shelf*, 63 *AJIL* (1969), 106; Robin R. Churchill and Alan V. Lowe, *The Law of the Sea* (Manchester: Manchester University Press, 1999), 60; Gilbert Gidel, *Le droit international public de la mer* (Chateauroux: Mellotté, 1932), Vol. 1, at 40; Mariangela Gramola, *State Succession and the Delimitation of the Caspian Sea*, 14 *Italian Yearbook of International Law* (2005), 237-238; Paul Tavernier, *Le statut juridique de la mer Caspienne: mer ou lac?*, *Actualité et droit international*, 20 October 1999, <<http://www.ridi.org/adi/199910a1.htm>>.

⁵⁷ See Roscini, above n. 5, 145-256.

⁵⁸ Compare this provision with Art. 5 (2) of the Rarotonga Treaty, Art. 7 of the

provision introduces an exception to the obligation contained in Article 3 (1) (d), i.e. the obligation not to allow on the state party's territory the possession of or control over any nuclear explosive device by anyone. But are the denuclearized states really "free" under international law to allow or deny the visit of nuclear ships and the overflight and landing of aircraft with nuclear weapons on board?

25. It is generally accepted that, under customary international law, there is no obligation on the coastal state to accept foreign ships in its ports: the entry can thus be prohibited.⁵⁹ According to the International Court of Justice (ICJ), it is "by virtue of its sovereignty that the coastal State may regulate access to its ports"⁶⁰: as these waters have a status identical to that of the land territory as far as the exercise of sovereignty is concerned, there is no obligation to allow access to the ports. Hence, several states' legislations provide that the relevant national authorities can in certain cases deny the authorization to the entry in the ports of nuclear propelled and nuclear armed ships.⁶¹ The denuclearized states could of course decide to authorize the entry, but only if this does not prejudice the purposes and objectives of the Semipalatinsk Treaty, as required by Article 4.

26. Customary law, though, admits the entry of ships in the ports and internal waters of a foreign state even without previous authorization in one case, i.e. when the ship is in a situation of force majeure or distress.⁶² The former has been defined in Article 23 of the 2001 International Law Commission (ILC) Articles on State Responsibility as "an irresistible force or [...] an unforeseen event, beyond the control of the State, making it materially impossible in the circumstances to perform the obligation", while the latter materializes when "the author of the act in question has no other reasonable way, in a situation of distress, of saving the author's life or the lives of other persons entrusted to the author's care" (Article 24).⁶³ Modern

Bangkok Treaty and Art. 4 (2) of the Pelindaba Treaty.

⁵⁹ See Giuseppe Cataldi, *Il passaggio delle navi straniere nel mare territoriale* (Milano: Giuffrè, 1990), 86; Louise de La Fayette, *Access to Ports in International Law*, 11 *International Journal of Marine and Coastal Law* (1996), 1-2; Rainer Lagoni, *Internal Waters, Seagoing Vessels in*, in Rudolf Bernhardt (ed.), *Encyclopedia of Public International Law*, Vol. II (1999), 1036-1037. It has been noted that "[i]t is at times indeed difficult to make distinction between a simple anchorage of ships and landing of aircraft and their stationing prohibited by the provisions of these Treaties" (Djamchid Momtaz, *Nuclear-Weapon-Free Zones in Africa and Asia*, in *Asian-African Legal Consultative Committee, Essays on International Law. Fortieth Anniversary Commemorative Volume* (1997), 198). Although the language of Art. 4 remains vague and does not specify what distinguishes transit from stationing, it appears that any temporary presence, to qualify as transit, would be restricted to a very short period of time only (Conrad, above n. 31, 5).

⁶⁰ *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v United States)*, Merits, Judgment of 27 June 1986, ICJ Reports 1986, para. 213.

⁶¹ Roscini, above n. 5, 197-201.

⁶² See Lagoni, above n. 59, 1040; Daniel Patrick O'Connell, *The International Law of the Sea* (Oxford: Clarendon Press, 1984), Vol. II, at 853-857.

⁶³ The mentioned grounds cannot be invoked to exclude wrongfulness if the state

shipping treaties usually contain a clause providing for the exception of force majeure.⁶⁴ In spite of its strictness, even the New Zealand Nuclear Free Zone, Disarmament and Arms Control Act does not limit “the freedom of [...] [a]ny ship or aircraft in distress”.⁶⁵ According to the Group entrusted with drafting the text of the Rarotonga Treaty, the presence of a ship with nuclear weapons run aground within the nuclear weapon-free zone does not entail the violation of the treaty by the state party to which those waters belong, if it promptly adopts all necessary measures to remove the arms from its territory.⁶⁶ However, according to other authors, nuclear ships can be denied entry into the ports and internal waters even in the above mentioned exceptional circumstances because of “an actual risk of criticality, radiation or radioactive contamination of the population of the coastal State, of the installations of the port and of the environment”.⁶⁷ This view seems to be confirmed by Article 24 of the ILC Articles, that rules out the possibility to invoke distress as a circumstance excluding wrongfulness if “the act in question is likely to create a comparable or greater peril” (the commentary to this provision makes the example of a nuclear submarine with a serious breakdown that might cause the radioactive contamination of the port in which it seeks refuge),⁶⁸ and by the declaration issued by the Australian Minister for Foreign Affairs and Trade with regard to the passage of the Japanese ship *Akatsuki Maru* (“[p]ort access is normally granted to ships in distress but safety would be a paramount consideration in deciding whether to grant access to the plutonium ship”).⁶⁹

27. As to the overflight of the territory of a state party to the Semipalatinsk Treaty by foreign aircraft carrying nuclear weapons, according to Article 3 (c) of the 1944 Chicago Convention (to which all five Central Asian states are parties) state aircraft, including military ones, cannot overfly the territory of another state without its authorization, while Article 35 (a) provides that “[n]o munitions of war or implements of war may be carried in or above the territory of a State in aircraft engaged in international navigation, except by permission of such State”. States can

invoking them has provoked, alone or in combination with other factors, the situation of force majeure or distress.

⁶⁴ O’Connell, above n. 62, 857. See also Art. 4 of the 1974 International Convention for the Safety of Life at Sea (SOLAS).

⁶⁵ Section 12, at <<http://canterbury.cyberplace.org.nz/peace/nukefree.html>>.

⁶⁶ Hisakazu Fujita, *The Changing Role of International Law in the Nuclear Age: From Freedom of the High Seas to Nuclear-Free Zones*, in Astrid J.M. Delissen and Gerard Jacob Tanja (eds.), *Humanitarian Law of Armed Conflict – Challenges Ahead. Essays in Honour of Frits Kalshoven* (Dordrecht-Boston-London: Martinus Nijhoff Publishers, 1991), 346.

⁶⁷ Werner Bischof, *Nuclear ships*, in Bernhardt (ed.), above n. 59, Vol. III (1997), 722. See also Alfred-Maurice de Zayas, *Ships in distress*, *ibid.*, Vol. IV (2000), 399.

⁶⁸ Report of the International Law Commission on the work of its fifty-third session (23 April – 1 June and 2 July – 10 August 2001), UN Doc. A/56/10, GAOR, fifty-sixth session, Suppl. No. 10, 194.

⁶⁹ 14 *Australian YIL* (1993), 445.

thus submit to authorization the overflight of their territory and the landing of foreign aircraft, determining the conditions for its granting, among which there could be the absence on board of nuclear arms and materials. State practice confirms this view. The United States granted the authorization of overflight to a French air tanker flying from France to Tahiti only after the French authorities had assured that the cargo “did not include nuclear material or components but rather consisted of naval stores”.⁷⁰ New Zealand does not allow aircraft with nuclear arms on board to overfly its territory,⁷¹ while in 1979 Australia signed an agreement with the United States authorizing the overflight of B-52 and their call in Darwin: the US government, however, agreed not to provide them with nuclear weapons.⁷² Spain has also adopted restrictive legislation in this field.⁷³

28. A nuclear warhead can be carried not only by a ship or aircraft, but also by a missile. Two cases must be distinguished, depending on whether the missile passes through the air space only or also through the outer space in order to reach its target.⁷⁴ In the former case, the states parties to the Semipalatinsk Treaty are under an obligation to deny permission to the overflight by the nuclear missile, as Article 3 (1) (d) (i) requires them not to allow the use of nuclear explosive devices in their territories.⁷⁵ The exception with regard to transit contained in Article 4 does not operate as far as missiles with a nuclear warhead are concerned: while the aircraft or ship could simply transport a nuclear explosive device from a location to another, a launched missile necessarily aims to hit a target and must thus be qualified as “use”,

⁷⁰ Abram Chayes, Thomas Ehrlich and Andreas F. Lowenfeld, *International Legal Process: Materials for an Introductory Course* (Boston: Little, Brown & Co., 1968), 1052.

⁷¹ New Zealand Nuclear Free Zone, Disarmament, and Arms Control Act, above n. 65, Section 10.

⁷² Australian Foreign Affairs Record, March 1985, 235-236; *ibid.*, September 1985, 863-864.

⁷³ See Art. 70 of Law No. 25 of 29 April 1964 (United Nations Legislative Series – National Legislation and Treaties Relating to the Law of the Sea (ST/LEG.SER.B/16), 1974, at 46). In an exchange of notes with the United States, the Spanish government reaffirmed the prohibition to overfly the national territory by aircraft with nuclear material or weapons on board (Javier Díez Hochleitner, Régimen de navegación de los buques de guerra extranjeros por el mar territorial español y de sus escalas en puertos españoles, 38 *Revista española de derecho internacional* (1986), 567).

⁷⁴ On the controversial border between air space and outer space, see Daniel Goedhuis, *The Problems of the Frontiers of Outer Space and Air Space*, 174 *Recueil des Cours* (1982), 391-402.

⁷⁵ Ronzitti reaches this conclusion through a different reasoning and in relation to the Treaties of Tlatelolco and Bangkok only (Natalino Ronzitti, *Missile Warfare and Nuclear Warheads - An Appraisal in the Light of the 1996 ICJ Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons*, 27 *Israel Yearbook on Human Rights* (1997), 255). However, there is no reason why the same conclusion should not apply to the Treaties of Rarotonga and Pelindaba too: as argued above, the exception clause with regard to transit is not applicable to nuclear missiles.

and not “transit”, of nuclear weapons.

29. On the contrary, if the missile, in its trajectory, passes through the outer space above a denuclearized state, this will not be entitled to deny the passage: indeed, the outer space is not subject to national appropriation and is free for exploration and use by all states. It would not be possible to invoke the 1967 Outer Space Treaty, Article IV (1) of which merely prohibits to place in orbit around the Earth or station objects carrying weapons of mass destruction, and does not deal with those flying through outer space in order to reach a target on Earth: it is necessary for the carrier to be prohibited that it completes at least one orbit around the Earth.⁷⁶ The destination exclusively for peaceful purposes provided in para. 2 of Article IV is also not relevant here, as its scope of application is the moon and other celestial bodies and not the outer space in general. What is more, with its inclusion the drafters of the 1967 treaty did not aim to prohibit all military activities, but only those in contrast with the provisions of the UN Charter on the use of armed force.⁷⁷

V. Grounds for Terminating the Obligations Arising from the Semipalatinsk Treaty

30. The right of the contracting parties to terminate their obligations under the Semipalatinsk Treaty can be founded on two legal bases: the general grounds for the termination and suspension of the operation of treaties, codified in the 1969 Vienna Convention on the Law of Treaties, and the withdrawal clause included in the final text of the treaty itself.⁷⁸ As to the former, Articles 60 and 62 of the Vienna Convention appear to be of particular importance for disarmament treaties, including those on nuclear weapon-free zones. Article 60 (2) (a) states that, unless otherwise provided,⁷⁹ a material breach of a multilateral treaty by one of the parties entitles the

⁷⁶ See Luigi Condorelli and Zidane Mériboute, *Some Remarks on the State of International Law Concerning Military Activities in Outer Space*, 6 *Italian YIL* (1985), 9, 20-25.

⁷⁷ On Art. IV of the Outer Space Treaty, see Sergio Marchisio, *Le basi militari nel diritto internazionale* (Milano: Giuffrè, 1984), 303-304.

⁷⁸ A ground for terminating or suspending the Semipalatinsk Treaty neither provided in the treaty itself nor codified in the Vienna Convention on the Law of Treaties is the outbreak of hostilities between parties. The matter is governed by customary international law, but it is unclear what this provides. Aust argues that the inclusion of “political” treaties among those that might be terminated by the outbreak of hostilities (suggested by Lord McNair over forty years ago) “needs to be re-examined in the light of changes during recent decades, in particular the conclusion of multilateral treaties on disarmament, arms control and demilitarisation” (Anthony Aust, *Modern Treaty Law and Practice* (Cambridge: Cambridge University Press, 2007), 309). In 2004, the ILC decided to include the topic in its programme of work and appointed Ian Brownlie as Special Rapporteur. On the application of the nuclear weapon-free zone treaties in time of armed conflict, see Roscini, above n. 5, 109-116.

⁷⁹ Art. 60 (4). For instance, Art. XII (2) of the Chemical Weapons Convention provides that “[i]n cases where a State Party has been requested by the Executive Council to take measures to redress a situation raising problems with regard to its compliance, and where

other parties by unanimous agreement to suspend the operation of the treaty in whole or in part or to terminate it in the relations between themselves and the defaulting State, or as between all the parties.⁸⁰ Furthermore, the party specially affected by the breach (e.g., the state whose territory has been reached by the radioactive pollution caused by the material breach) can invoke it as a ground for suspending the operation of the treaty in whole or in part in the relations between itself and the defaulting State (Article 60 (2) (b)).

31. If the treaty is “of such a character that a material breach of its provisions by one party radically changes the position of every party with respect to the further performance of its obligations under the treaty”, any party other than the defaulting State can invoke the breach as a ground for suspending (but not terminating) the operation of the treaty in whole or in part with respect to itself (Article 60 (2) (c)).⁸¹ The main obligations contained in the Semipalatinsk Treaty fall within the scope of this paragraph. Indeed, the prohibitions to station, possess, control, test, manufacture, stockpile, to conduct research on nuclear explosive devices and to seek or receive assistance to these aims can be qualified as “integral” obligations, as they operate “in an all-or-nothing fashion”⁸²: even though they pursue a collective interest of the group, “each parties’ performance is effectively conditioned upon and requires the performance of the other”.⁸³ As Gerald Fitzmaurice puts it, “the obligation of each

the State Party fails to fulfil the request within the specified time, the Conference may, inter alia, upon the recommendation of the Executive Council, restrict or suspend the State Party’s rights and privileges under this Convention until it undertakes the necessary action to conform with its obligations under this Convention”. A similar provision is contained also in Art. V (2) of the CTBT.

⁸⁰ In its Advisory Opinion on the legal consequences for states of the continued presence of South Africa in Namibia notwithstanding Security Council Resolution 276 (1970), the ICJ has held that Art. 60 is “in many respects” a codification of existing customary international law (ICJ Reports 1971, para. 94). This view was more recently reasserted in the judgment on the Gabčíkovo-Nagymaros Project case (above n. 50, para. 46).

⁸¹ Art. 60 (2) (c) is echoed in Art. 42 (b) (ii) of the 2001 ILC Articles on State Responsibility. As the Special Rapporteur Crawford has noted, the category of integral obligations “has as much relevance for State responsibility as it has for treaty suspension. The other parties to an integral obligation which has been breached may have no interest in its suspension and should be able to insist, vis-à-vis the responsible State, on cessation and restitution” (James Crawford, Fourth Report on State Responsibility, A/CN.4/517, 2 April 2001, 15).

⁸² Ibid.

⁸³ Report of the International Law Commission on the work of its fifty-third session, above n. 68, 299. The Commission includes disarmament and nuclear free zone treaties among the examples of this type of obligations. See also the Report of the International Law Commission on the work of its eighteenth session (4 May – 19 July 1966), UN Doc. A/6309/Rev.1, GAOR, twenty-first session, Suppl. No. 9, at 255. In legal literature, see Aust, above n. 78, 294-295; K. Sachariew, State Responsibility for Multilateral Treaty Violations: Identifying the Injured State and Its Legal Status, 35 Netherlands ILR (1988), 281, who makes the example of the 1963 Nuclear Test Ban Treaty. Paul Reuter has also supported the

party to disarm, or not to exceed a certain level of armaments, or not to manufacture or possess certain types of weapons, is necessarily dependent on a corresponding performance of the same thing by all the other parties, since it is the essence of such a treaty that the undertaking of each party is given in return for a similar undertaking by the others".⁸⁴

32. Nonetheless, the Semipalatinsk Treaty also contains obligations of a different nature. The prohibitions to allow the disposal of radioactive waste and to provide fissionable material to non-nuclear weapon states without IAEA safeguards and the obligations of physical protection of nuclear material and equipment and of assistance in the environmental rehabilitation of contaminated territories are assumed *erga omnes partes*: like integral obligations, they are expression of a collective interest and are not assumed towards one or more specific parties, but towards the group as a whole.⁸⁵ All parties "are recognized as having a common interest, over and above any individual interest that may exist in a given case".⁸⁶ However, these obligations differ from integral ones in that, their performance by one member of the group is not dependent on a corresponding performance by the others.⁸⁷ These obligations are thus covered not by para. 2 (c) of Article 60 of the Vienna Convention, but by paras. 2 (a) and (b).⁸⁸

33. Whatever the nature of the breached provision, Article 60 only applies to a "material breach": would the acquisition or production of nuclear explosive devices or their stationing within the nuclear weapon-free zone be a "material breach" of the Semipalatinsk Treaty? An affirmative answer appears preferable, if one considers that a "material breach" is a "violation of a provision essential to the accomplishment of the object or purpose of the treaty", and that the object and purpose of the Semipalatinsk Treaty is to ensure the total absence of nuclear explosive devices from Central Asia with the ultimate goal of eliminating those weapons globally.⁸⁹

application of Art. 60 (2) (c) to disarmament treaties (Introduction to the Law of Treaties (London and New York: Kegan Paul International, 1995), 38), while Lysén suggests that the application of para. 2 (a) of Art. 60 would be preferable (Göran Lysén, The Adequacy of the Law of the Treaties to Arms Control Agreements, in Julie Dahlitz (ed.), Avoidance and Settlement of Arms Control Disputes (New York and Geneva: United Nations, 1994), 141).

⁸⁴ Gerald Fitzmaurice, Second Report on the Law of Treaties, A/CN.4/107, 15 March 1957, 54.

⁸⁵ Report of the International Law Commission on the work of its fifty-third session, above n. 68, 320-321.

⁸⁶ James Crawford, Third Report on State Responsibility, A/CN.4/507, 15 March 2000, 41.

⁸⁷ Therefore, integral obligations can be considered a sub-category of obligations *erga omnes partes* (Crawford, above n. 86, 47).

⁸⁸ A nuclear weapon-free zone treaty might also contain obligations of a mainly bilateral character, assumed towards one or more specific parties: an example is the prohibition of armed attack on nuclear installations situated within the zone contained in Art. 11 of the Pelindaba Treaty.

⁸⁹ See preamble of the Semipalatinsk Treaty. See also D.N. Hutchinson, Solidarity

34. A fundamental change of circumstances could also be invoked by the parties in order to terminate or suspend their participation in the Semipalatinsk Treaty. Article 62 of the Vienna Convention, which is generally thought to reflect customary international law,⁹⁰ requires some cumulative conditions for this ground to be invoked: the circumstances must have existed at the time of the conclusion of the treaty and must have constituted an essential basis of the consent of the parties to be bound by the treaty; and the change must be fundamental, “completely” unforeseen and having the effect of radically transforming the extent of obligations still to be performed under the treaty.⁹¹ As acknowledged by the ICJ in the *Gabčíkovo-Nagymaros* case, though, “[t]he negative and conditional wording of Article 62 [...] is a clear indication [...] that the stability of the treaty relations requires that the plea of fundamental change of circumstances be applied only in exceptional cases”,⁹² which might at least partly explain why “the doctrine of fundamental change has extremely rarely been invoked successfully before international judicial bodies”.⁹³ In any case, all five states parties to the Semipalatinsk Treaty have acceded to the 1969 Vienna Convention and are thus required to comply with the procedure spelt out in Articles 65-68 when invoking a ground for termination or suspension provided therein.⁹⁴

35. A further (and easier to invoke) means at the disposal of the parties in order to terminate their obligations under the Semipalatinsk Treaty is expressly provided by the treaty itself. Like all disarmament agreements, the nuclear weapon-free zone treaties contain very broad withdrawal clauses.⁹⁵ The inclusion of such clauses in disarmament treaties has been the object of discussion. According to Sims, “[t]he logic of withdrawal clauses implies at least a partial reversibility of the treaties in which they are incorporated. Now, it is by no means generally agreed that a

and Breaches of Multilateral Treaties, 59 BYBIL (1989), 196.

⁹⁰ Fisheries Jurisdiction (United Kingdom v Iceland), Jurisdiction, Judgment of 2 February 1973, ICJ Reports 1973, para. 36.

⁹¹ Implicit reference to the *rebus sic stantibus* doctrine appears to have been made by the United States *ad abundantiam* when denouncing the 1972 Anti-Ballistic Missile (ABM) Treaty (read the US declaration at <<http://www.acronym.org.uk/docs/0112/doc01.htm#text>>). See Rein Müllerson, *The ABM Treaty: Changed Circumstances, Extraordinary Events, Supreme Interests and International Law*, 50 ICLQ (2001), 539; and the opposite view suggested by Malgosia Fitzmaurice and Olufemi Elias, *Contemporary Issues in the Law of Treaties* (Utrecht: Eleven Publishing, 2005), 195.

⁹² *Gabčíkovo-Nagymaros*, above n. 50, para. 104.

⁹³ Fitzmaurice and Elias, above n. 91, 188-189.

⁹⁴ On whether or not these procedural requirements reflect customary international law, see Fitzmaurice and Elias, above n. 91, 195-198.

⁹⁵ Art. 54 (a) of the Vienna Convention on the Law of Treaties provides that the withdrawal of a party may take place in conformity with the provisions of the treaty itself. It is debatable whether the withdrawal clause allows not only the termination of the treaty but also its suspension (Duncan B. Hollis, *Russia Suspends CFE Treaty Participation*, ASIL Insight, 23 July 2007, at <<http://asil.org/insights/2007/07/insights070723.html>>).

disarmament treaty should be reversible”.⁹⁶ On the contrary, Cannizzaro doubts that nuclear non-proliferation treaties such as the NPT are irreversible.⁹⁷ The (scarce) practice seems to support the latter view. None of the Security Council resolutions concerning the North Korean withdrawal from the NPT qualifies such withdrawal as illegal, but on the contrary they try to persuade the Asian state with different degrees of pressure to retract its announcement and return to the NPT.⁹⁸ In the 1993 debates in the Security Council, the North Korean representative affirmed that “[t]he withdrawal of our country from the NPT was based on our full right under the Treaty, a right that belongs to every sovereign Member State”⁹⁹ and even the South Korean representative noted that “every party has the right to withdraw from the Treaty”.¹⁰⁰ The British representative also did not question “the right of States to withdraw from treaties if such withdrawal is in accordance with the provisions of the treaty concerned”.¹⁰¹ The very fact that the three depositaries of the NPT issued a joint statement questioning the existence of the “extraordinary events” relating to the subject matter of the treaty claimed by North Korea in 1993 seems to suggest that the withdrawal would have been lawful had that requirement been met.¹⁰² Russia did not challenge the legality of the US withdrawal from the ABM Treaty in December 2001,¹⁰³ and no state (not even the other parties) seems to have labelled as illegal Russia’s statement on the suspension of its obligations under the Treaty on Conventional Armed Forces in Europe (CFE) and related agreements in July 2007.¹⁰⁴

36. Be that as it may, the fact remains that a withdrawal clause has been

⁹⁶ Nicholas A. Sims, *Approaches to Disarmament: An Introductory Analysis* (London: Quaker Peace and Service, 1979), 51-52.

⁹⁷ Enzo Cannizzaro, *Recesso dal Trattato sulla non proliferazione nucleare e minaccia alla pace*, 89 *Rivista di diritto internazionale* (2006), 1081-1082.

⁹⁸ See SC Resolutions 825 of 11 May 1993, 1695 of 15 July 2006 and 1718 of 15 October 2006.

⁹⁹ S/PV.3212, 11 May 1993, 7.

¹⁰⁰ *Ibid.*, at 30.

¹⁰¹ *Ibid.*, at 54.

¹⁰² S/25515, 2 April 1993, reprinted in SCOR, Forty-eighth year, Supplement for April, May and June 1993, at 15.

¹⁰³ On the contrary, President Putin recognized that “[t]he Treaty does indeed allow each of the parties to withdraw from it under exceptional circumstances”, although it qualified the US decision as a mistake (<<http://www.acronym.org.uk/docs/0112/doc01.htm#text>>).

¹⁰⁴ Hollis, above n. 95. NATO states declared themselves “disappointed” and “deeply concerned” by Russia’s decision but did not challenge its legality (NATO Response to Russian Announcement of Intent to Suspend Obligations under the CFE Treaty, NATO Press Release 2007(085), 16 July 2007, <<http://www.nato.int/docu/pr/2007/p07-085e.html>>). See also the US Department of State’s spokesman’s declaration, Russian Announcement of Intention to Suspend Implementation of Conventional Armed Forces in Europe Treaty, Press Statement 2007/588, 14 July 2007, at <<http://www.state.gov/r/pa/prs/ps/2007/88417.htm>>.

included in the final text of the Semipalatinsk Treaty.¹⁰⁵ In the Rarotonga and Bangkok Treaties, the right of withdrawal is triggered by the breach by another party of a provision essential to the achievement of the objectives of the treaty.¹⁰⁶ Taking the Treaties of Tlatelolco and Pelindaba as a model, Article 16 of the Semipalatinsk Treaty provides that “[a]ny Party may, by written notification addressed to the Depositary, withdraw from the Treaty if it decides that extraordinary events, related to the subject-matter of this Treaty, have jeopardized its supreme national interests”.¹⁰⁷ The withdrawal takes effect twelve months after the date of receipt of

¹⁰⁵ As to the relationship between an express right of withdrawal included in the treaty and the general grounds for termination, in particular the fundamental change of circumstances, it has been suggested that “the relations between the parties should be governed first and foremost by what they have expressly agreed” (Fitzmaurice and Elias, above n. 91, 193). Müllerson, on the other hand, argues that “[e]xpress provisions providing for the possibility of the denunciation of a treaty do not exclude the use of another concept available for treaty termination” (above n. 91, 530). Similarly, see Paolo Fois, *Il consenso ad obbligarsi nel Trattato sulla non-proliferazione nucleare*, 91 *Rivista di diritto internazionale* (2008), 50. It has also been noted that the concept of “material breach” under Art. 60 of the 1969 Vienna Convention applies to “a more limited number of situations than that covered by the extraordinary circumstances clause”, as “the latter might also refer to events which do not involve the responsibility of the other party” (Natalino Ronzitti, *Problems of Arms Control Treaty Interpretation*, in Julie Dahlitz and Detlev Dicke (eds.), *The International Law of Arms Control and Disarmament, Proceedings of the Symposium, Geneva 28 February-2 March 1991* (New York: United Nations, 1991), 121). The same writer also notes that the extraordinary circumstances clause allows withdrawal from a disarmament treaty in a number of circumstances greater than the *rebus sic stantibus* doctrine, even though only the operation of the former is conditioned upon giving notice of the intention to withdraw to the other parties (*ibid.*). The opposite argument is made by Müllerson, who maintains that recourse to a withdrawal clause based on “extraordinary events” and “supreme interests” requires much more concrete threats than the fundamental but broad circumstances required by the *rebus sic stantibus* doctrine (Müllerson, above n. 91, 531).

¹⁰⁶ Arts. 13 and 22, respectively. The clause contained in the Rarotonga Treaty provides that the right of withdrawal can be exercised also in the case of a violation of the “spirit” of the treaty, which is of difficult interpretation (David A.C. Freestone and J. Scott Davidson, *Nuclear Weapon-Free Zones*, in Istvan Pogany (ed.), *Nuclear Weapons and International Law* (Aldershot-Brookfield-Hong Kong-Singapore-Sydney: Avebury, 1987), 201). It is worth noting that the withdrawal clause contained in the three additional protocols to the Rarotonga Treaty is modelled on that contained in the Treaty of Tlatelolco and allows withdrawal if the party decides that extraordinary events related to the subject matter of the protocols have jeopardized its supreme interests. The withdrawal takes effect three months (not twelve, as in the main treaty) after the notification to the Depositary. The same goes for the additional protocol to the Bangkok Treaty, but this provides for a period of twelve months.

¹⁰⁷ Art. 20 of the Pelindaba Treaty is almost identical to Art. 16 of the Semipalatinsk Treaty, while Art. 31 of the Treaty of Tlatelolco, although very similar, is broader, as it refers to “circumstances” (and not to “extraordinary events”), which may affect not only the supreme interests of the denouncing party but also “the peace and security of one or more Contracting Parties”.

the notification by the Depositary, during which the party must still observe the procedures to review compliance.¹⁰⁸ The lapse of time is aimed to permit consultations and negotiations in order to avoid the withdrawal. Non-compliance with the twelve month term, however, does not necessarily render the withdrawal unlawful: the withdrawal will become effective only after the twelve month period, in spite of the intention of the party to withdraw with immediate effect.¹⁰⁹

37. The Semipalatinsk Treaty does not set up any mechanism to review the party's decision to withdraw, but requires that the notification of the withdrawal include a statement indicating the "extraordinary events" jeopardizing the party's supreme national interests. Even though the other parties could question the existence of such extraordinary events,¹¹⁰ the lack of any definition and the vagueness of this concept hardly make it an effective deterrent against to the frivolous exercise of the right of withdrawal.¹¹¹ However, a role might be played by the ICJ (should its

¹⁰⁸ See, with regard to the NPT, Susan Carmody, *Balancing Collective Security and National Sovereignty: Does the United Nations have the Right to Inspect North Korea's Nuclear Facilities?*, 18 *Fordham ILJ* (1994-1995), 283-284. The Treaty of Tlatelolco provides for an obligation to notify the intention to withdraw to the OPANAL's General Secretary, the Rarotonga Treaty to the Director of the South Pacific Bureau for Economic Co-operation, the Pelindaba Treaty to the Depositary (i.e., the African Union's Secretary-General) and the Bangkok Treaty to the members of the Commission for the South-East Asia Nuclear Weapon-Free Zone. The Latin-American treaty also provides that the withdrawal shall be communicated to the other contracting parties and to the UN Secretary-General, Security Council and General Assembly as well as to the OAS Secretary-General.

¹⁰⁹ This situation materialized in January 2003, when North Korea announced its intention to withdraw with immediate effect from the NPT, even though this provides that the withdrawal takes effect three months after the notification to the other parties and to the UN Security Council (Art. X). This was justified by North Korea on the basis of its 1993 announcement to withdraw from the NPT, subsequently suspended. See Cannizzaro, above n. 97, 1080.

¹¹⁰ The fact that every state party can "decide" when extraordinary events have jeopardized its supreme national interests does not mean that such decision cannot be scrutinized by the other parties. Otherwise, the circulation of the notification of withdrawal by the Depositary to all the other parties would make little sense (Art. 16 (b)).

¹¹¹ It is not easy to understand what is meant by "extraordinary events". Examples might be new developments in the field of nuclear military technology or the entry into force of a particularly important amendment (Egon Schwelb, *The Nuclear Test Ban Treaty and International Law*, 58 *AJIL* (1964), 663). According to Gounelle, as disarmament treaties are based on the balance of forces existing at the moment of negotiations, "[t]out élément qui viendrait troubler cet équilibre accepté est considéré comme un 'événement extraordinaire en relation avec l'objet du traité'" (Max Gounelle, *La motivation des actes juridiques en droit international public* (Paris: Pedone, 1979), 155). Also the breach of the treaty or the withdrawal exercised by another party have been qualified as "extraordinary events" justifying the withdrawal (Jozef Goldblat and Péricles Gasparini Alves, *Responses to Violations of Arms Control Agreements*, in Serge Sur (ed.), *Disarmament and Arms Limitation Obligations, Problems of Compliance and Enforcement* (Aldershot et al.: Dartmouth; Geneva: UNIDIR, 1994), 284; Fernando Mariño Menéndez, *Zonas libres de armas nucleares en el derecho*

jurisdiction be established over the case), since a controversy among states parties on whether a certain situation amounts to an “extraordinary event” according to Article 16 of the Semipalatinsk Treaty would be a legal dispute concerning the interpretation of a treaty under Article 26 (2) (a) of the ICJ Statute. Furthermore, as suggested by Shaker in relation to the NPT, “an act of withdrawal by a Party in order to acquire nuclear weapons could be considered a ‘situation which might lead to international friction’ justifying an investigation by the Security Council under Article 34 of the UN Charter” and could even be characterised “as a ‘threat to the peace’ under Article 39, justifying the application of appropriate sanctions under Articles 40, 41 and 42”.¹¹² Of course, not every withdrawal would automatically amount to a threat to the peace. Such a conclusion could only be reached by the Council on a case by case basis, taken the existing circumstances into account.

internacional, in *Cursos de derecho internacional de Vitoria-Gasteiz 1983* (1985), 162). Lysén argues that “extraordinary events” would be a breach of the treaty, the supervening impossibility of performance, the fundamental change of circumstances and the outbreak of war or armed conflict. To be “extraordinary”, the event should also “either be unforeseeable or, though foreseeable, thought by the parties as highly unlikely to occur” (Göran Lysén, *The International Regulation of Armaments: The Law of Disarmament* (Uppsala: Iustus, 1990), 176-177). Announcing its intention to withdraw from the NPT on 10 January 2003, North Korea qualified the US hostile policy against North Korea as “extraordinary events” jeopardizing North Korean security (Raven Winters, *Preventing Repeat Offenders: North Korea’s Withdrawal and the Need for Revisions to the Nuclear Non-Proliferation Treaty*, 38 *Vanderbilt Journal of Transnational Law* (2005), 1513). In order to justify its withdrawal from the ABM Treaty, the United States seems to have qualified the September 11th events and the possible missile attacks with weapons of mass destruction and without warning against the United States by terrorists or “rogue states” as extraordinary events related to the subject matter of the treaty and jeopardizing US security (13 December 2001) (<<http://www.acronym.org.uk/docs/0112/doc01.htm#text>>). Russia also listed the “exceptional circumstances affecting the security of the Russian Federation” and justifying the decision to suspend its participation in the CFE Treaty. The list includes the failure of Eastern European countries to make the necessary changes to the treaty regime in order to take their NATO membership into account; the increased number of NATO states and the “exclusive group” character of the alliance; the US plan to deploy conventional forces in Bulgaria and Romania; the failure to early ratify the Adaptation Agreement and to comply with the Istanbul Agreements by certain CFE parties; and the non-participation of the Baltic states in the CFE Treaty (Information on the decree “On Suspending the Russian Federation’s Participation in the Treaty on Conventional Armed Forces in Europe and Related International Agreements”, 14 July 2007, at <<http://www.cdi.org/russia/johnson/2007-161-32.cfm>>). In the context of the NPT, Germany proposed the conclusion of an agreement clarifying, among other things, what constitutes an “extraordinary event” (Preparatory Committee for the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Working Paper No. 15, NPT/CONF.2005/PC.III/WP.15, 29 April 2004, at <<http://www.reachingcriticalwill.org/legal/npt/prepcom04/papers/GermanyWP15.pdf>>, 2).

¹¹² Mohamed I. Shaker, *The Nuclear Non-Proliferation Treaty, Origin and Implementation, 1959-1979* (London-Rome-New York: Oceana Publications, 1980), Vol. II, 896. See also Fois, above n. 105, 57-58.

VI. The Negative Security Assurances by the Nuclear Weapon States

38. Para. II of the above mentioned Resolution 3472 (XXX) B of 11 December 1975, containing the General Assembly's definition of "nuclear weapon-free zone", provides that the nuclear weapon states must "undertake or reaffirm, in a solemn international instrument having full legally binding force, such as a treaty, a convention or a protocol, the following obligations: (a) To respect in all its parts the statute of total absence of nuclear weapons defined in the treaty or convention which serves as the constitutive instrument of the zone; (b) To refrain from contributing in any way to the performance in the territories forming part of the zone of acts which involve a violation of the aforesaid treaty or convention; (c) To refrain from using or threatening to use nuclear weapons against the States included in the zone".¹¹³ When drafting the Treaty of Tlatelolco, the participating states discussed how such commitments should be formalized. Certain states were in favour of a General Assembly resolution approving the establishment of the zone and bounding all states that had endorsed it with their vote. Others preferred a protocol attached to the main treaty, containing the obligations of the nuclear weapon powers towards the denuclearized states.¹¹⁴ The latter view eventually prevailed and was also adopted by the drafters of the Treaties of Rarotonga, Pelindaba, Bangkok and Semipalatinsk: it can now be maintained that an additional protocol containing (negative) security assurances is an essential component of the model treaty for the establishment of nuclear weapon-free zones in inhabited regions of the world.¹¹⁵ In its 1996 Advisory

¹¹³ See also para. 62 of the Final Document of the tenth UN General Assembly Special session (1978), 17 ILM (1978), 1025. According to the 1976 Comprehensive Study, the security assurances are an important element of a nuclear weapon-free zone (above n. 3, Annex I, paras. 85 and 115). Some members of the Conference of the Committee on Disarmament argued however that the assurances by nuclear weapon states are not an indispensable requirement for the establishment of a nuclear weapon-free zone and should be given on a case-by-case basis (Bulgaria (*ibid.*, Annex II, para. 101) and Mongolia (*ibid.*, para. 129)). This position was criticised by the Swedish representative (*ibid.*, para. 57). During the negotiations that would lead to the opening for signature of the Treaty of Tlatelolco, Mexico argued that the provision of security assurances by the nuclear powers was extremely useful but not necessary in order to establish the nuclear weapon-free zone, while Brazil took the opposite view and maintained that they were an essential and non-negotiable requirement (Mónica Serrano, *Common Security in Latin America – The 1967 Treaty of Tlatelolco* (London: Institute of Latin American Studies, 1992), 36-37).

¹¹⁴ Georges Fischer, *La non prolifération des armes nucléaires*, 13 *Annuaire français de droit international* (1967), 88; Alfonso García Robles, *Mesures de désarmement dans des zones particulières: le traité visant l'interdiction des armes nucléaires en Amérique latine*, 133 *Recueil des Cours* (1971), 66. The nuclear states feared that the inclusion of security assurances in a General Assembly resolution might become a precedent in order to confer binding effect on those instruments (Serrano, above n. 113, 41).

¹¹⁵ According to Rosen, however, "[g]iven that a politically if not legally binding NSA [Negative Security Assurance] has been given by the United States and other states in the

Opinion on the *legality of nuclear weapons*, the ICJ unanimously acknowledged that the threat and use of nuclear weapons must be consistent “with the requirements of the international law applicable in armed conflict, particularly those of the principles and rules of international humanitarian law, as well as with specific obligations under treaties and other undertakings which expressly deal with nuclear weapons”, where “specific obligations under treaties” can be interpreted as a reference to the protocols additional to the nuclear weapon-free zone treaties and “other undertakings” to the assurances contained in the unilateral declarations issued by the nuclear weapon states in 1995.¹¹⁶

39. The security assurances must be distinguished in positive (by which the nuclear powers undertake to assist a non-nuclear weapon state should this be the victim of an attack carried out with nuclear weapons) and negative (by which the nuclear weapon states commit themselves not to use nuclear weapons against non-nuclear weapon states). Only the latter are included in the protocols annexed to the Tlatelolco, Rarotonga, Pelindaba, Bangkok and Semipalatinsk Treaties.¹¹⁷ However,

NPT context, and that the P-5 have all committed to end nuclear weapons testing by signing the CTBT, P-5 participation in most of the current zones awaiting ratification does not add much to the security of regional states” (Mark E. Rosen, *Nuclear Weapons Free Zones: Time for a Fresh Look*, 8 Duke JCIL (1997-1998), 56-57). In his opinion, the security assurances encourage the use of weapons of mass destruction by “rogue states”.

¹¹⁶ Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 8 July 1996, ICJ Reports 1996, dispositif, para. 105 (2) (D). Although with some language differences, in April 1995 France, Russia, United Kingdom and United States declared they would not use nuclear weapons against the non-nuclear weapon states parties to the NPT, except in case of an attack carried out by the non-nuclear weapon state allied to or in association with a nuclear weapon state against their territories, armed forces or a state towards which it exists a security commitment. China more comprehensively declared that it would not use nuclear weapons “at any time or under any circumstances” against non-nuclear weapon states (S/1995/261 (Russian Federation), S/1995/262 (United Kingdom), S/1995/263 (United States), S/1995/264 (France) and S/1995/265 (China), reprinted in Tariq Rauf, *Nuclear-Weapon-Free Zones (NWFZs)*, Center for Nonproliferation Studies, Monterey Institute of International Studies (1997), <<http://cns.miis.edu/pubs/reports/nwfz.htm>>, 33-35). The declarations were endorsed by SC Res. 984 of 11 April 1995. In a Memorandum in connection with Belarus, Kazakhstan and Ukraine’s accession to the NPT (5 December 1994), United States, United Kingdom and Russia (and France in a separate statement) also affirmed that they would not use nuclear weapons against any non-nuclear weapon state party to NPT “except in the case of an attack on themselves, their territories or dependent territories, their armed forces, or their allies, by such a state in association or alliance with a nuclear weapon state” (*ibid.*, 31). Finally, in October 2000, the five nuclear powers reaffirmed the positive and negative security assurances, as contained in the 1995 unilateral declarations and in SC Res. 984 (1995), with regard to Mongolia, that had unilaterally declared itself a denuclearized state in 1992 (Identical letters dated 27 October 2000 from the Permanent Representatives of China, France, the Russian Federation, the United Kingdom and the United States to the United Nations addressed to the Secretary-General and to the President of the Security Council, A/55/530 – S/2000/1052, 31 October 2000, at 2).

¹¹⁷ As observed, “[i]nscrive les garanties positives dans le cadre d’un accord sur

unlike the negative security assurances issued unilaterally by France, Russia, United Kingdom and United States,¹¹⁸ the protocols attached to the nuclear weapon-free zone treaties contain not only the undertaking not to use nuclear weapons, but also not to threaten their use.¹¹⁹

40. Like the protocols additional to the Treaties of Rarotonga, Pelindaba and Bangkok and unlike Protocol II of the Treaty of Tlatelolco, the Semipalatinsk Protocol is addressed only to the five nuclear powers under the NPT, which are expressly named.¹²⁰ This is unfortunate, as the consequence is that India and Pakistan will not be expected to give any formal security assurances towards the Central Asian states, even though they possess nuclear weapons and, because of their geographical proximity, would be able to reach the region with their missiles.

41. The beneficiaries of the assurances are the states parties to the nuclear weapon-free zone.¹²¹ The negative security assurances involve a commitment not to threaten or use nuclear weapons or other nuclear explosive devices not only against their territory, but also against their armed forces wherever they are located, even outside the nuclear weapon-free zone (for instance, a military base situated in a

une zone exempte d'armes nucléaires revient à cette solution paradoxale que la nucléarisation garantit la dénucléarisation" (Szurek, above n. 1, 187). The positive security assurances are recalled in SC Res. 255 (19 June 1968) and Res. 984 (11 April 1995).

¹¹⁸ See above n. 116. Only China committed itself not to threaten the use of nuclear weapons against denuclearized states.

¹¹⁹ Marco Roscini, *Threats of Armed Force and Contemporary International Law*, 54 *Netherlands IJL* (2007), 244.

¹²⁰ Protocol II of the Treaty of Tlatelolco does not list the states that are entitled to sign it, which allows the future adherence by de facto nuclear powers (Héctor Gros Espiell, *El derecho de los tratados y el Tratado de Tlatelolco*, 4 *Anuario hispano-luso-americano de derecho internacional* (1973), 324).

¹²¹ The protocol annexed to the Bangkok Treaty prohibits the threat and use of nuclear weapons by the nuclear states not only against the parties to the treaty, but also "within the Southeast Asia Nuclear Weapon-Free Zone" (Art. 2). This entails the prohibition to launch missiles with a nuclear warhead from ships, submarines or aircraft located within the zone even if the target is situated outside, and also the prohibition to use nuclear weapons against means of transport (even if they belong to a nuclear weapon state) situated in the internal waters, territorial sea and, most importantly, exclusive economic zone of the states parties to the Bangkok Treaty. The nuclear weapon states might also be prevented from using nuclear weapons against a state that has not ratified the Bangkok Treaty but whose land, sea or air territory is included in its territorial scope of application. The United States has thus refused to sign the protocol unless this is amended (Romain Yakemtchouk, *Zones dénucléarisées*, 50 (4-5) *Studia Diplomatica* (1997), 55). A similar position has been taken by France (Joelle Bourgois, *The Role Carried out by the Zones Exempt from Nuclear Arms*, in Péricles Gasparini Alves and Daiana Belinda Cipollone (eds.), *Nuclear-Weapon-Free Zones in the 21st Century* (New York and Geneva: United Nations, 1997), 126). In particular, the nuclear states have requested the deletion of the sentence "not to use or threaten to use nuclear weapons within the Southeast Asia Nuclear Weapon-Free Zone" (Norachit Sinhaseni, *Southeast Asia Nuclear-Weapon-Free Zone: Next Steps*, 20 (1) *Disarmament: A periodic review of the United Nations* (1997), 67-68).

foreign territory or a warship on the high seas).¹²² On the other hand, it is unclear whether the Semipalatinsk Protocol prohibits the threat and use of nuclear weapons against those denuclearized states that detain other weapons of mass destruction, such as chemical or bacteriological arms: the fact that the prohibitions do not apply “under any circumstances” (as provided for instance in Art. I (1) of the 1993 Chemical Weapons Convention) appears to support the conclusion that, in this case, the threat or use of nuclear weapons would not be inconsistent with the protocol. With regard to the African nuclear weapon-free zone, the Special Assistant to the US President for Arms Control stated that “Protocol I [of the Pelindaba Treaty] will not limit options available to the United States in response to an attack by an African Nuclear Weapons-Free Zone party using weapons of mass destruction”.¹²³ This view also finds support in Judge Schwebel’s Dissenting opinion on the *legality of nuclear weapons*, where he maintains that “[a]s long as [...] ‘rogue states’ menace the world (whether they are or are not Parties to the NPT), it would be imprudent to set policy on the basis that the threat or use of nuclear weapons is unlawful ‘in any circumstance’. Indeed, it may not only be the rogue States but criminals or fanatics whose threats or acts of terrorism conceivably may require a nuclear deterrent or response”.¹²⁴

42. Apart from prohibiting the threat or use of nuclear weapons or other nuclear explosive devices against states parties to the Semipalatinsk Treaty, the protocol also requires the five nuclear weapon states not to contribute “to any act that constitutes a violation of the Treaty or this Protocol by Parties to them” (Article 2). This assurance does not cover conduct carried out independently from an action of another party to the treaty or the protocol. The Protocols of Rarotonga and Bangkok employ an almost identical wording, while those of Tlatelolco and Pelindaba do not refer to the fact that the act constituting a violation must be committed by another contracting party.

43. As to the prospects for the ratification of the Semipalatinsk Protocol by the nuclear states, Russia and China have already declared that they endorse the conclusion of the Semipalatinsk Treaty.¹²⁵ On the other hand, United Kingdom,

¹²² This conclusion finds some support in the declarations issued by the nuclear powers in 1995, according to which the security assurances may be withdrawn in case of an attack not only against the nuclear state’s territory, but also against its armed forces wherever they are stationed.

¹²³ The White House Special Briefing Topic: ANWFZ – The Africa Nuclear Weapons-Free Zone and the Signing of the Treaty of Pelindaba (11 April 1996), reprinted in Rosen, above n. 115, 51-52.

¹²⁴ Legality of the Threat or Use of Nuclear Weapons, above n. 116, p. 329.

¹²⁵ Ministry of Foreign Affairs of the Russian Federation, Press Release, 8 September 2006, <http://cns.miis.edu/pubs/week/pdf_support/060908_russian_press_statement.pdf>; Foreign Ministry Spokesman Qin Gang’s Comments on a Treaty on the Central Asia Nuclear Weapon Free Area to be Signed by the Five Central Asian Countries, 7 September 2006,

United States and France have withdrawn their support to the initiative because previous security arrangements like the 1992 Tashkent Collective Security Treaty might prejudice the application of the Semipalatinsk Treaty in case of armed conflict.¹²⁶ Negotiations are thus still going on in order to secure the participation of all nuclear weapon states in the denuclearization of Central Asia, which is the reason why the protocol has not yet been opened for signature.

VII. The Verification and Enforcement Mechanisms

44. General Assembly Resolution 3472 B (XXX) of 11 December 1975 recalls that one of the essential elements of a nuclear weapon-free zone treaty is an international system of verification that ensures compliance with the denuclearization obligations. According to the 1976 Comprehensive Study, “[t]he viability of the nuclear-weapon-free zone will largely depend on an effective system of verification and control that ensures the nuclear-weapon-free status of the zone”. The scope and nature of the system would necessarily differ from region to region and would depend upon the obligations assumed, but it should in any case extend to all nuclear activities of the states parties.¹²⁷ The 1999 Guidelines also emphasize that “[a] nuclear-weapon-free zone should provide for the effective verification of compliance with the commitments made by the parties to the treaty, *inter alia*, through the application of full-scope IAEA safeguards to all nuclear activities in the zone”, as provided in the IAEA documents INFCIRC/153 and INFCIRC/540.¹²⁸

45. Verification has been defined as “a process covering the entire set of measures aimed at enabling the Parties to an agreement to establish that the conduct of the other Parties is not incompatible with the obligations they have assumed under that agreement”.¹²⁹ According to Krass, “[t]he verification process consists of two major components: monitoring, which is the primarily technical process of gathering and analyzing evidence on compliance behavior; and evaluation, which is the process of weighing and interpreting the evidence to determine whether or not a violation has

<<http://www.fmprc.gov.cn/eng/xwfw/s2510/t270714.htm>>.

¹²⁶ See above Section II, para. 9. United Kingdom, United States and France were the only states to vote against the adoption of GA Res. 61/88 of 6 December 2006 welcoming and supporting the opening for signature of the Semipalatinsk Treaty.

¹²⁷ 1976 Comprehensive Study, above n. 3, Annex I, paras. 123, 128. The importance of an effective verification mechanism was emphasized by Czechoslovakia (*ibid.*, Annex II, para. 47), Soviet Union (para. 72), Mongolia (para. 122) and United Kingdom (para. 144).

¹²⁸ Report of the Disarmament Commission, above n. 5, para. 34.

¹²⁹ Serge Sur, Introduction, in Serge Sur (ed.), *Disarmament and Arms Limitation Obligations. Problems of Compliance and Enforcement* (Aldershot: Dartmouth; Geneva: UNIDIR, 1994), 2. In 1995, the UN Secretary-General published a study on verification (Verification in all its aspects, including the role of the United Nations in the field of verification. Report of the Secretary-General, A/50/377 and Corr. 1, A/52/269, A/54/166, A/54/555).

occurred".¹³⁰ In the nuclear weapon-free zone treaties, these tasks are usually performed by two parallel mechanisms, one entrusted to the IAEA and the other to regional organs established by the treaty or – as in the Rarotonga Treaty – already existing. This two-pronged system is due to the fact that the IAEA safeguards agreements, conceived in relation to Article III of the NPT, were not meant to monitor compliance with the broader obligations contained in a nuclear weapon-free zone treaty.¹³¹ The two mechanisms, thus, do not overlap, but have different competences: the IAEA detects the diversion of fissile materials from peaceful to military uses, while the regional organs monitor compliance with the other denuclearization obligations, in particular with the prohibition of stationing nuclear weapons within the zone.¹³²

46. In the Semipalatinsk Treaty, the role of the IAEA is outlined in Article 8, according to which – as already noted¹³³ - states parties are under an obligation to conclude with the Agency and bring into force a comprehensive safeguard agreement (INFCIRC/153 (Corr.)) and an Additional Protocol (INFCIRC/540 (Corr.)) no later than eighteen months from the treaty's entry into force. The IAEA safeguards constitute a confidence building measure and an early warning mechanism that might trigger responses by the international community in case of breach of non-proliferation obligations. They include on-site inspections of declared and, under the Additional Protocol, undeclared sites, on-going monitoring and evaluation. With regard to the Central Asian states, if Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan have already concluded both the comprehensive safeguards agreement and the Additional Protocol with the IAEA, Kyrgyzstan has so far only signed the Protocol.¹³⁴

47. As to the regional verification mechanism referred to in Article 10 and described in the annex of the Semipalatinsk Treaty, it neither envisages the establishment of an international organisation nor relies on existing ones, but simply provides for annual consultative meetings to review compliance, with decisions taken by consensus.¹³⁵ Extraordinary consultative meetings can also be convened at the

¹³⁰ Allan S. Krass, *Arms Control Treaty Verification*, in Richard Dean Burns (ed.), *Encyclopedia of Arms Control and Disarmament* (New York: Charles Scribner's Sons, 1993), Vol. I, 297.

¹³¹ Xia Liping, *Nuclear-Weapon-Free Zones: Lessons for Nonproliferation in Northeast Asia*, 6 (4) *The Nonproliferation Review* (Fall 1999), 84.

¹³² Marie-Françoise Furet, *Le désarmement nucléaire* (Paris: Pedone, 1973), 181. The Rarotonga Treaty explicitly states that the regional mechanism, and in particular special inspections, "shall not duplicate safeguards procedures to be undertaken by the IAEA" (Annex 4, para. 5).

¹³³ Above Section II, para. 12.

¹³⁴ Source: <http://www.iaea.org/OurWork/SV/Safeguards/sg_protocol.html>.

¹³⁵ It appears that earlier drafts of the treaty provided for the establishment of an organisation entrusted with verification, but these provisions were eventually deleted and do not appear in the final text (Parrish, above n. 8, 145).

request of any party (when the motion is seconded by two other parties) to discuss matters related to the implementation of the treaty and its violations. The need to convene the extraordinary meeting must be explained. The five nuclear weapon states under the NPT and the representatives of relevant international organisations can participate as observers with the consent of the states parties and the meetings' decisions are reflected in outcome documents in Russian and, if needed, in English. A record of the consultative meetings may be transmitted, with the consent of all parties, to all interested international organisations as well as to the observers. One cannot however fail to note that, although the regular meetings of the parties might play a positive role and "attenuate rivalries among the countries in the region and foster the good neighbourly relations necessary for the planned regional cooperative undertakings in the field of environmental security",¹³⁶ the regional machinery could have been more elaborate and intrusive, in particular by establishing verification organs with the authority to conduct inspections as in the other nuclear weapon-free zone treaties.¹³⁷

48. If a violation of the nuclear weapon-free zone treaty is detected through the mechanisms described above, the breached obligation must be enforced so that compliance is ensured. Even though there is no specific enforcement mechanism envisaged in the Semipalatinsk Treaty, enforcement could still be achieved in two ways: multilaterally or unilaterally. With regard to the former, the states parties might react to a violation in the framework of a competent international organisation, such as by resorting to the UN Security Council or General Assembly.¹³⁸ Indeed, several Security Council resolutions have qualified the proliferation of weapons of mass destruction and of their means of delivery as a threat to international peace and security.¹³⁹ In the Semipalatinsk Treaty, no role of the UN main organs in the enforcement process is expressly envisaged, which marks a difference with other nuclear weapon-free zone treaties. However, this would not prevent the Security Council from dealing with a violation of the denuclearization regime should this be

¹³⁶ Goldblat, above n. 11, 32.

¹³⁷ On the inspection mechanisms in the other nuclear weapon-free zone treaties, see Roscini, above n. 5, 355-358.

¹³⁸ James Crawford, *The International Law Commission's Articles on State Responsibility* (Cambridge: Cambridge University Press, 2002), 302. The above mentioned Comprehensive Study refers to the need to coordinate the nuclear weapon-free zone treaties with the UN collective security system (1976 Comprehensive Study, above n. 3, Annex I, paras. 123, 135, 144.).

¹³⁹ See SC Res. 825 of 11 May 1993 (linking "progress in non-proliferation" to the maintenance of international peace and security) and the more explicit Resolutions 1540 of 28 April 2004, 1695 of 15 July 2006 and 1718 of 14 October 2006. In Res. 1540, the Council also affirmed "its resolve to take appropriate actions against any threat to international peace and security caused by the proliferation of nuclear, chemical and biological weapons and their means of delivery". For a critical discussion of Res. 1540, see Daniel H. Joyner, *Non-proliferation Law and the United Nations System: Resolution 1540 and the Limits of the Power of the Security Council*, 20 *Leiden JIL* (2007), 508-515.

qualified as a threat to the peace: even in the absence of a specific provision contained in a treaty, any UN member state (and even a non-member which is a party to the dispute and accepts to settle it peacefully) can bring any dispute, or situation which might lead to international friction or give rise to a dispute, to the attention of the Security Council or of the General Assembly (Article 35 of the UN Charter). The IAEA Board of Governors might also report to the Security Council and to the General Assembly cases of non-compliance with obligations towards the IAEA (Article XII (C) of the IAEA Statute).

49. States parties might also react unilaterally to a breach of the denuclearization regime and adopt countermeasures under the conditions provided in customary international law.¹⁴⁰ In particular, the state party taking the countermeasure might react in kind and breach the same provision initially violated by the wrongdoer providing that this obligation is not *erga omnes partes*.¹⁴¹ Furthermore, the state party might breach other treaties in force with the wrongdoer, such as those providing for economic cooperation. In any case, the limits highlighted in Articles 50 and 51 of the 2001 ILC Articles on State Responsibility, which reflect customary international law, must be respected. In particular, Article 50 provides that a state taking countermeasures is not relieved from fulfilling its obligations “under any dispute settlement procedure applicable between it and the responsible State”. In this context, Article 11 of the Semipalatinsk Treaty should be recalled, as it contains the obligation to settle disputes involving the interpretation or application of the treaty “through negotiations or by any other means as may be deemed necessary by the Parties”.

VIII. Conclusions

50. The opening for signature of the Semipalatinsk Treaty marks the successful conclusion of the negotiations for the establishment of a nuclear weapon-free zone in Central Asia, the first situated entirely in the Northern hemisphere and sharing borders with two nuclear weapon states. Although it is true that – as Goldblat suggests – “this treaty may help build up geopolitical stability and security in Central Asia” and is thus “a valuable asset for the cause of non-proliferation”,¹⁴² it contains however lights and

¹⁴⁰ See Roscini, above n. 5, 370-381.

¹⁴¹ On the *erga omnes partes* character of certain obligations contained in the Semipalatinsk Treaty, see above Section V, para. 32.

¹⁴² Goldblat, above n. 11, 32. According to Enkhsaikhan, the establishment of the Central Asian nuclear weapon-free zone might have “a positive impact on maintaining and strengthening the overall balance and stability in the subregion and its strategically important adjacent areas” (Jargalsaikhany Enkhsaikhan, Central Asia – Future Perspectives, in Gasparini Alves and Cipollone, above n. 121, 97). The First Deputy Foreign Minister of Kyrgyzstan also observed that “if implemented, this initiative would make for deep positive movements on the global, regional and subregional levels, as well as in the sphere of bilateral relations of countries in our region” (Dzhekshenkulov, above n. 48, 54).

shadows. It is the first of its kind to require the states parties to comply with the CTBT and the Additional Protocol on IAEA strengthened safeguards. It prohibits not only ready for use nuclear explosive devices, but also their components. It is the only nuclear weapon-free zone treaty providing for an obligation of assistance in the efforts toward the rehabilitation of radioactively contaminated territories. The obligation of physical protection of nuclear material, facilities and equipment included in Article 9 could also make the Semipalatinsk Treaty an effective tool against the risk of nuclear terrorism. Finally, unlike in the Treaties of Tlatelolco, Rarotonga and Bangkok, military nuclear research is expressly prohibited.

51. On the downside, the verification mechanism provided in the annex is disappointing, as it only provides for consultative meetings to review compliance, with decisions taken by consensus. Furthermore, there is no protocol attached to the Semipalatinsk Treaty by the ratification of which the nuclear weapon states commit themselves not to carry out nuclear test explosions within the zone, and the disposal of a state party's radioactive waste in its own territory is not prohibited. The list of provisions contained in other nuclear weapon-free zone treaties but not in the Semipalatinsk Treaty also includes the prohibition of armed attack against nuclear installations situated within the zone, the obligation to declare, dismantle and destroy or convert nuclear explosive devices and facilities for their manufacture, and the obligation to accede to the Convention on Early Notification of a Nuclear Accident.

52. However, even though the Semipalatinsk Treaty is far from being perfect, one should see the glass half full, and not half empty. Each nuclear weapon-free zone treaty necessarily reflects the specific characteristics of the region to which it applies and, if it aims to be successful, has to reach a compromise between the interests of the regional states and those of the nuclear powers. After years of gestation, the Semipalatinsk Treaty has finally been opened for signature. The perfect is sometimes the enemy of the good.